

Ассоциации *Adenophoro lamarckii*–*Caricetum pediformis* (1-25) и *Aconogono alpini*–*Caricetum pediformis* (26-45)

Table 1

Associations *Adenophoro lamarckii*–*Caricetum pediformis* (1-25) and *Aconogono alpini*–*Caricetum pediformis* (26-45)

| Номер описания  | 1   | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20   | 21    | 22    | 23    | 24    | 25    | 26  | 27    | 28   | 29   | 30   | 31    | 32   | 33   | 34   | 35    | 36    | 37    | 38   | 39   | 40   | 41   | 42    | 43   | 44   | 45    | a  | b   |    |   |
|---|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|---|-------|------|------|------|-------|------|------|------|-------|-------|-------|------|------|------|------|-------|------|------|-------|----|-----|----|---|
| Ассоциация  | <i>Adenophoro lamarckii</i> – <i>Caricetum pediformis</i> (a) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |       |       |       | <i>Aconogono alpini</i> – <i>Caricetum pediformis</i> (b) |       |      |      |      |       |      |      |      |       |       |       |      |      |      |      |       |      |      |       |    |     |    |   |
| Номер описания в фитоценологе   | 12425   | 12426 | 12465 | 12439 | 12438 | 12414 | 35581 | 12443 | 12430 | 12415 | 12448 | 12460 | 35557 | 35573 | 35577 | 12413 | 12418 | 12421 | 12466 | 8267 | 35556 | 35553 | 12416 | 35585 | 12437 | 7053  | 36710 | 8314 | 8320 | 8428 | 36677 | 7672 | 8342 | 7679 | 36715 | 12561 | 36713 | 5964 | 5968 | 7066 | 5970 | 36563 | 7030 | 8338 | 12560 |    |     |    |   |
| Высота над ур.м.  | 880   | 880   | 880   | 1050  | 1060  | 930   | 1170  | 1065  | 900   | 920   | 1100  | 925   | 967   | 1045  | 965   | 930   | 960   | 1065  | 880   | 890  | 990   | 995   | 960   | 940   | 1060  | 1996  | 1634  | 1528 | 1559 | 1496 | 1320  | 1900 | 1423 | 1620 | 1492  | 1430  | 1470  | 1958 | 1971 | 1960 | 1733 | 1860  | 1642 | 1416 | 1460  |    |     |    |   |
| Экспозиция,°  |   |       | 360   |       |       | 190   | 90    | 360   |       | 90    | 360   | 360   | 100   |       | 10    |       | 360   | 360   | 360   | 350  | 82    | 102   | 45    | 320   | 120   | 70  | 270   | 20   | 140  | 10   | 40    |      | 190  |      | 45    | 310   | 130   | 160  | 140  |      | 140  |       | 90   |      |       |    |     |    |   |
| Крутизна,°  |   |       | 10    |       |       | 7     | 20    | 5     |       | 15    | 7     | 12    |       | 7     |       | 3     | 12    | 10    | 5     | 13   | 7     | 5     | 5     | 30    | 25    | 7   | 7     | 7    | 30   | 7    |       | 10   |      | 5    | 3     | 30    | 20    | 30   |      | 20   |      | 7     |      |      |       |    |     |    |   |
| ПП кустарников  |   |       | 10    |       | 15    |       |       |       |       |       | 10    | 25    |       |       |       | 15    |       | 15    | 10    | 20   | 15    |       |       | 20    |       |   |       | 20   | 20   |      | 20    | 20   |      |      |       | 30    | 20    |      |      |      |      |       |      |      |       |    |     |    |   |
| ПП травостоя  | 75  | 75    | 75    | 65    | 60    | 45    | 85    | 70    | 80    | 75    | 60    | 85    | 70    | 85    | 70    | 50    | 45    | 80    | 80    | 70   | 70    | 85    | 85    | 80    | 55    | 80  | 90    | 70   | 80   | 80   | 75    | 90   | 70   | 70   | 80    | 80    | 90    | 70   | 85   | 85   | 80   | 80    | 90   | 70   | 90    |    |     |    |   |
| Число видов   | 60  | 58    | 53    | 43    | 42    | 50    | 49    | 39    | 50    | 43    | 34    | 47    | 45    | 38    | 39    | 43    | 40    | 42    | 45    | 42   | 39    | 49    | 40    | 47    | 37    | 44  | 40    | 35   | 33   | 27   | 47    | 42   | 33   | 47   | 33    | 36    | 42    | 41   | 37   | 41   | 35   | 33    | 34   | 39   | 41    |    |     |    |   |
| <b>Диагностические виды (Д.в.) асс. <i>Adenophoro lamarckii</i>–<i>Caricetum pediformis</i></b> |   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |       |       |       |   |       |      |      |      |       |      |      |      |       |       |       |      |      |      |      |       |      |      |       |    |     |    |   |
| <i>Bupleurum scorzonerifolium</i>   | +   | +     | +     | .     | .     | +     | +     | +     | +     | +     | .     | +     | .     | +     | +     | +     | +     | .     | +     | +    | .     | .     | +     | 2     | .     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | IV  | .  |   |
| <i>Stipa pennata</i>  | +   | 2     | 2     | 3     | 5     | .     | .     | 20    | .     | .     | 15    | 6     | 5     | .     | 7     | .     | .     | +     | .     | 15   | 3     | 3     | 5     | 5     | .     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | .   | IV | + |
| <i>Fragaria viridis</i>   | 7   | 10    | 5     | 2     | 2     | 3     | 5     | 5     | 10    | +     | 5     | 3     | 3     | 3     | 5     | 3     | +     | +     | 3     | 8    | 5     | 3     | +     | 2     | +     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | .   | V  | . |
| <i>Calamagrostis epigeios</i>   | 2   | 5     | +     | .     | .     | 2     | .     | 10    | 5     | .     | 7     | .     | 3     | 8     | 3     | 5     | .     | 20    | 10    | 7    | 5     | 3     | .     | .     | .     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | .   | IV | + |
| <i>Thalictrum petaloideum</i>   | 2   | +     | .     | +     | +     | 2     | +     | +     | +     | 2     | +     | +     | +     | +     | +     | 2     | 2     | .     | .     | 2    | .     | 2     | +     | +     | +     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | V   | +  |   |
| <i>Dracocephalum ruyschianum</i>  | 5   | 5     | .     | 3     | 2     | +     | 3     | 2     | .     | +     | 7     | 7     | 3     | 2     | .     | 2     | +     | .     | 5     | .    | +     | +     | .     | 5     | 5     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | IV  | +  |   |
| <i>Trommsdorfia maculata</i>  | +   | +     | +     | +     | +     | +     | 2     | +     | .     | +     | +     | +     | +     | 3     | 2     | +     | +     | .     | +     | .    | +     | +     | +     | .     | +     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | V   | +  |   |
| <i>Hieracium umbellatum</i>   | +   | +     | +     | .     | +     | +     | .     | +     | 2     | 3     | 2     | 2     | +     | +     | +     | 2     | .     | +     | +     | +    | .     | +     | +     | .     | 2     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | .   | IV | . |
| <i>Scabiosa ochroleuca</i>  | +   | +     | +     | +     | +     | +     | +     | .     | .     | .     | .     | .     | .     | .     | .     | +     | .     | .     | .     | .    | +     | .     | .     | +     | .     | .   | .     | .    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | .  | III | +  |   |
| <i>Geranium pseudosibiricum</i>   | +   | +     | .     | +     | +     | 3     | +     | .     | .     | .     | +     | .     | .     | +     | .     | .     | .     | .     | 2     | .    | .     | .     | +     | .     | .     | .   | +     | +    | .    | .    | .     | .    | .    | .    | .     | .     | .     | .    | .    | .    | .    | .     | .    | .    | .     | II | II  |    |   |

| Номер описания  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a   | b   |     |     |     |   |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|---|
| <i>Galium boreale</i>   | 2 | 2 | 2 | + | + | + | 3 | . | 2 | 2  | +  | 5  | +  | 2  | +  | 2  | 2  | +  | 2  | +  | +  | +  | +  | 3  | 2  | +  | .  | 2  | +  | .  | +  | .  | 2  | +  | +  | 2  | 2  | +  | +  | +  | 2  | +  | +  | +  | 2  | .   | V   | V   |     |     |   |
| <i>Aconitum barbatum</i>  | + | 2 | . | 2 | + | + | 2 | . | + | .  | .  | 2  | .  | .  | .  | .  | .  | +  | 2  | 4  | 2  | 2  | +  | .  | .  | 4  | 2  | 5  | 7  | .  | 2  | 8  | 10 | 2  | .  | 4  | +  | 4  | 6  | 2  | .  | 2  | .  | 3  | .  | III | IV  |     |     |     |   |
| <i>Lupinaster pentaphyllus</i>                                  | + | + | + | 2 | + | + | + | + | + | +  | 2  | 2  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | 2  | +  | +  | +  | +  | +  | .  | .  | +  | +  | +  | .  | 3  | +  | .  | 2  | 2  | +  | +  | .  | .  | .  | .  | .  | +   | IV  | III |     |     |   |
| Д.в. асс. <i>Aconogono alpini</i> – <i>Caricetum pediformis</i> |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |   |
| <i>Potentilla matsuoana</i>                                     | . | . | + | . | . | . | . | . | + | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | +  | +  | +  | +  | 2  | 5  | 5  | 2  | +  | .  | .  | .  | .  | +  | .  | 2  | .  | +   | +   | +   | +   | IV  |   |
| <i>Elymus gmelinii</i>  | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | 3  | +  | 5  | 3  | 3  | 2  | 5  | .  | 2  | 5  | .  | 2  | +  | 2  | 3  | +  | .  | 3   | 5   | .   | V   |     |   |
| <i>Poa sibirica</i>   | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | 12 | 3  | 3  | 5  | 15 | 5  | +  | 2  | .  | 3  | .  | .  | .  | 2  | .  | 3  | .   | .   | .   | III |     |   |
| <i>Gentiana macrophylla</i>                                     | . | . | . | + | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | 2  | 2  | .  | +  | 2  | +  | +  | +  | +  | +  | .  | .  | .  | .  | .  | .  | +  | .   | +   | III |     |     |   |
| <i>Geranium transbaicalicum</i>                                 | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | 5  | 5  | 7  | .  | 5  | 12 | +  | 3  | 2  | 5  | .  | .  | .  | .  | +  | 2  | .  | 5   | +   | III |     |     |   |
| <i>Aconogonon alpinum</i>                                       | . | . | . | . | . | . | 2 | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | 5  | +  | 3  | 14 | 5  | .  | 3  | .  | .  | .  | .  | 7  | +  | .  | 2  | 2  | +  | 2  | 7   | +   | +   | IV  |     |   |
| <i>Saussurea controversa</i>                                    | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | +  | .  | .  | .  | 2  | 3  | 3  | .  | .  | .  | .  | .  | 7  | 7  | 3  | .  | +  | .  | .   | .   | .   | III |     |   |
| <i>Artemisia santolinifolia</i>                                 | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | 5  | 8  | 3  | 15 | .  | .  | .  | .  | 5  | .  | .  | .  | +  | 5  | 7  | 20 | .  | 10 | .   | .   | +   | III |     |   |
| Д.в. пор. <i>Helictotrichetalia schelliani</i>                  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |   |
| <i>Coluria geoides</i>  | 2 | + | . | . | . | 2 | . | + | . | +  | .  | .  | .  | .  | +  | .  | +  | +  | +  | .  | .  | .  | +  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .   | III | + |
| <i>Helictotrichon altaicum</i>                                  | . | + | 5 | . | 3 | + | 3 | 3 | 7 | 5  | +  | +  | 3  | .  | 3  | +  | 5  | 2  | +  | 15 | .  | +  | 7  | 7  | 3  | 20 | .  | .  | .  | 2  | .  | .  | .  | 5  | 18 | .  | .  | 10 | 20 | 25 | .  | 15 | .  | .  | .  | .   | .   | .   | V   | II  |   |
| <i>Helictotrichon schellianum</i>                               | 7 | 5 | + | 2 | . | + | + | + | + | +  | +  | +  | .  | .  | 3  | .  | +  | .  | +  | .  | +  | +  | .  | .  | 3  | .  | 2  | 15 | .  | +  | 10 | .  | +  | 2  | 7  | 5  | 3  | 2  | +  | .  | 5  | 10 | +  | 10 | .  | IV  | IV  |     |     |     |   |
| <i>Schizonepeta multifida</i>                                   | + | + | + | + | 2 | + | + | + | + | +  | +  | +  | 2  | +  | 2  | 2  | +  | 3  | +  | +  | 2  | +  | +  | 2  | +  | 5  | 5  | +  | .  | +  | .  | .  | .  | 2  | .  | 2  | .  | +  | 9  | 5  | .  | +  | 2  | .  | 2  | .   | V   | III |     |     |   |
| <i>Aster alpinus</i>  | + | . | . | + | 2 | + | + | + | + | +  | +  | +  | .  | .  | .  | +  | +  | .  | .  | +  | .  | +  | +  | +  | 2  | 2  | 3  | 7  | 2  | .  | 2  | +  | .  | 2  | 2  | +  | .  | 2  | +  | +  | .  | +  | +  | +  | .  | IV  | IV  |     |     |     |   |
| <i>Carex pediformis</i>   | 3 | 3 | 3 | + | . | . | 5 | . | 3 | 5  | .  | 3  | 10 | 5  | 5  | .  | .  | +  | 2  | 3  | 10 | 7  | .  | 7  | .  | 20 | 10 | 5  | 7  | 7  | 5  | +  | 7  | 25 | 3  | 7  | 3  | 15 | 10 | 15 | 10 | 3  | 30 | 20 | 5  | IV  | V   |     |     |     |   |
| Д.в. класса <i>Cleistogenetea squarrosae</i>                    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |   |
| <i>Caragana pygmaea</i>   | . | . | 4 | . | . | . | 2 | . | . | .  | 2  | 25 | .  | 3  | .  | .  | .  | .  | +  | 10 | 15 | .  | +  | 7  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | II  | +   |   |
| <i>Festuca valesiaca</i>  | 2 | 2 | 2 | 3 | 2 | 3 | 3 | + | 2 | 7  | .  | +  | +  | 3  | .  | .  | 5  | .  | 2  | +  | .  | +  | +  | 3  | 5  | .  | 2  | 2  | 5  | .  | +  | 5  | 10 | 3  | 8  | 8  | 5  | .  | .  | .  | 2  | 10 | .  | +  | 3  | IV  | IV  |     |     |     |   |
| <i>Potentilla bifurca</i>                                       | + | . | + | . | . | + | + | . | + | +  | .  | .  | +  | .  | .  | +  | +  | .  | .  | +  | .  | +  | +  | +  | .  | .  | +  | .  | .  | .  | +  | .  | +  | +  | +  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | +   | +   | III | III |     |   |
| <i>Poa botryoides</i>   | 3 | 2 | 5 | . | . | + | 7 | + | 3 | +  | 5  | 2  | 3  | 5  | 10 | 3  | 2  | 5  | 5  | 3  | 3  | 5  | +  | 7  | .  | +  | 15 | +  | 3  | 3  | .  | .  | .  | .  | .  | .  | 5  | 3  | 2  | +  | .  | 5  | 7  | .  | 3  | .   | V   | III |     |     |   |
| Прочие виды   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |   |
| <i>Galium verum</i>   | 2 | + | + | + | 2 | 2 | + | + | + | +  | +  | 2  | +  | +  | 2  | 2  | +  | 2  | +  | 2  | 2  | +  | 2  | 3  | +  | +  | 2  | +  | +  | 2  | 2  | 3  | +  | 3  | 3  | 2  | 7  | +  | 2  | +  | +  | 2  | 5  | +  | 2  | .   | V   | V   |     |     |   |
| <i>Artemisia tanacetifolia</i>                                  | 3 | 2 | 5 | 5 | 2 | 3 | 2 | 5 | 2 | 3  | 5  | 3  | +  | 5  | 5  | 5  | 2  | 5  | 10 | 3  | 5  | 2  | 2  | 7  | 2  | 5  | +  | 5  | 3  | 2  | 2  | .  | 5  | 2  | 5  | 2  | 2  | +  | 2  | 3  | 3  | 2  | 3  | 30 | 2  | .   | V   | V   |     |     |   |
| <i>Phlomis tuberosa</i>   | + | + | + | 3 | + | + | 7 | + | + | 2  | +  | 2  | 3  | 2  | 3  | +  | +  | +  | +  | 3  | 3  | 3  | 2  | 2  | .  | .  | 5  | .  | .  | 10 | 3  | .  | .  | +  | 2  | 2  | 2  | 2  | +  | .  | +  | 2  | +  | .  | 3  | .   | V   | IV  |     |     |   |
| <i>Allium strictum</i>  | 2 | . | 2 | + | + | + | 2 | . | + | +  | 2  | +  | +  | .  | 2  | +  | +  | +  | +  | .  | +  | 2  | 2  | +  | +  | +  | +  | +  | .  | .  | .  | .  | +  | .  | +  | +  | +  | .  | 5  | 2  | 2  | 2  | .  | +  | .  | .   | V   | III |     |     |   |
| <i>Oxytropis strobilacea</i>                                    | 2 | 2 | + | + | 3 | + | . | + | + | 5  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | +  | .  | 2  | +  | .  | +  | .  | 2  | .  | +  | +  | +  | .  | +  | .  | .  | .   | III | III |     |     |   |

| Номер описания                   | 1 | 2 | 3  | 4  | 5  | 6 | 7  | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44  | 45  | a   | b   |     |
|----------------------------------|---|---|----|----|----|---|----|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| <i>Bromopsis inermis</i>         | . | . | 2  | .  | .  | . | +  | 2 | . | .  | .  | .  | +  | 3  | 2  | .  | +  | +  | +  | +  | 2  | +  | .  | .  | .  | .  | .  | 8  | +  | .  | .  | 2  | +  | .  | 3  | .  | 5  | +  | .  | +  | 2  | +  | 2  | +   | 5   | III | IV  |     |
| <i>Pulsatilla patens</i>         | 7 | 5 | 12 | 15 | 18 | 7 | 8  | 5 | 7 | 15 | 3  | 18 | 5  | 30 | 5  | 10 | 7  | +  | 5  | 8  | 5  | 15 | 17 | 10 | 12 | 2  | 2  | .  | .  | .  | 5  | .  | .  | +  | 2  | .  | .  | 7  | 10 | .  | 15 | +  | 2  | .   | 2   | V   | III |     |
| <i>Phleum phleoides</i>          | 5 | 2 | 7  | +  | 3  | 2 | 15 | 2 | + | 5  | +  | 2  | 7  | 7  | 12 | +  | 6  | +  | 7  | +  | 5  | 15 | 7  | 7  | 3  | .  | 3  | 3  | 7  | +  | 2  | .  | 3  | 3  | 8  | .  | 3  | .  | .  | .  | 2  | .  | .  | 2   | .   | V   | III |     |
| <i>Vicia multicaulis</i>         | 2 | 7 | 2  | +  | 2  | 3 | 2  | 3 | 2 | 3  | 3  | 5  | 3  | 3  | 3  | 5  | 2  | 2  | 3  | .  | 3  | 3  | 7  | +  | +  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | 2  | +  | +  | +  | .  | +  | +  | .   | .   | V   | II  |     |
| <i>Polygala comosa</i>           | + | + | +  | +  | 2  | 2 | 3  | + | + | +  | .  | 2  | +  | +  | +  | +  | +  | +  | +  | +  | +  | 2  | +  | +  | +  | .  | +  | .  | +  | 2  | 2  | .  | .  | +  | .  | .  | +  | 3  | 2  | +  | .  | .  | .  | .   | .   | V   | III |     |
| <i>Iris ruthenica</i>            | 3 | 2 | 12 | 3  | +  | 3 | +  | 2 | 5 | .  | .  | 3  | 3  | .  | 5  | +  | 2  | 5  | 3  | +  | 5  | 3  | 3  | +  | +  | .  | .  | .  | .  | 30 | .  | .  | 2  | 5  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | 5   | V   | II  |     |     |
| <i>Achillea asiatica</i>         | 2 | 2 | .  | 2  | 2  | 4 | 2  | 2 | 2 | 2  | 2  | .  | 2  | 2  | .  | 2  | 2  | 4  | .  | .  | 2  | 2  | 2  | 2  | 2  | .  | +  | 2  | .  | .  | 4  | .  | +  | .  | .  | .  | 2  | .  | .  | .  | 2  | .  | .  | 2   | 2   | IV  | II  |     |
| <i>Tephrosieris integrifolia</i> | + | + | +  | +  | +  | + | .  | + | + | +  | +  | +  | +  | +  | .  | .  | .  | +  | +  | +  | +  | +  | +  | .  | +  | .  | +  | +  | +  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .   | .   | IV  | II  |     |
| <i>Spiraea chamaedrifolia</i>    | . | + | 2  | 2  | 3  | 3 | .  | . | + | 2  | .  | 5  | .  | +  | .  | 2  | 15 | .  | 3  | +  | 3  | 10 | .  | .  | 3  | .  | .  | .  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | 15 | +  | 15 | .  | 2  | .  | .   | .   | IV  | II  |     |
| <i>Thalictrum foetidum</i>       | + | + | +  | .  | .  | 2 | .  | . | + | +  | .  | .  | +  | .  | 2  | +  | .  | +  | +  | .  | .  | .  | 2  | .  | .  | +  | 2  | 2  | 5  | 7  | 3  | 5  | .  | 2  | 3  | .  | 3  | +  | .  | .  | .  | .  | .  | .   | III | III |     |     |
| <i>Anemone sylvestris</i>        | . | . | +  | .  | +  | + | +  | . | + | .  | .  | +  | +  | .  | +  | +  | .  | 2  | +  | .  | 3  | +  | +  | +  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | +  | .   | .   | III | I   |     |
| <i>Lychnis sibirica</i>          | + | + | +  | .  | .  | + | +  | + | + | +  | +  | .  | +  | .  | +  | .  | .  | .  | .  | .  | +  | +  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | III | .   |     |
| <i>Rosa acicularis</i>           | 5 | + | 2  | .  | .  | . | .  | + | 5 | .  | +  | +  | .  | 3  | 20 | .  | .  | 2  | 2  | .  | 2  | 5  | +  | .  | .  | .  | +  | .  | .  | +  | 7  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | 5  | +   | 3   | III | II  |     |
| <i>Potentilla tericholica</i>    | . | . | .  | +  | 2  | + | 2  | 2 | . | +  | +  | .  | .  | 2  | .  | +  | 2  | .  | .  | .  | .  | 2  | .  | +  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | 7  | .  | 5   | .   | .   | III | I   |
| <i>Myosotis imitata</i>          | + | + | +  | .  | .  | . | 3  | . | + | +  | .  | .  | +  | +  | .  | +  | .  | +  | .  | +  | .  | +  | .  | +  | .  | +  | 2  | .  | .  | .  | +  | .  | .  | +  | +  | +  | +  | .  | .  | +  | .  | .  | .  | +   | III | III |     |     |
| <i>Sanguisorba officinalis</i>   | + | 2 | .  | 3  | 2  | + | .  | . | + | .  | 2  | .  | .  | 2  | +  | +  | .  | .  | 2  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 7  | .  | 7  | 2  | .   | .   | III | I   |     |
| <i>Galatella angustissima</i>    | + | . | +  | .  | .  | . | .  | + | . | +  | .  | .  | +  | .  | 2  | +  | .  | +  | +  | .  | +  | +  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2   | .   | .   | III | +   |
| <i>Veratrum nigrum</i>           | + | + | .  | .  | .  | . | +  | . | + | .  | .  | +  | +  | .  | +  | .  | .  | +  | +  | 2  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | 2  | .  | .  | +   | .   | III | I   |     |
| <i>Adenophora coronopifolia</i>  | . | + | .  | .  | .  | 2 | 2  | + | . | +  | .  | .  | .  | 3  | .  | +  | .  | +  | .  | +  | +  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | III | +   |     |
| <i>Onobrychis arenaria</i>       | + | . | .  | +  | +  | . | .  | . | + | .  | 2  | +  | +  | +  | .  | .  | .  | .  | .  | +  | .  | .  | +  | +  | .  | .  | .  | .  | .  | 5  | .  | .  | .  | .  | 5  | .  | .  | .  | .  | .  | .  | .  | 10 | III | I   |     |     |     |
| <i>Bupleurum multinerve</i>      | . | . | .  | 2  | +  | . | .  | . | . | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | 7  | 5  | 5  | 2  | +  | 2  | 5  | 3  | 2  | 5  | 2  | +  | .  | .  | 2  | .  | .  | .   | +   | .   | I   | IV  |
| <i>Pentaphylloides fruticosa</i> | . | . | .  | .  | 12 | . | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 12 | 15 | 2  | .  | .  | .  | .  | +  | 30 | 20 | .  | 2  | .  | 10 | 5  | 5  | 7  | 5  | .   | +   | 2   | I   | IV  |
| <i>Valeriana transjensis</i>     | . | . | +  | +  | .  | + | +  | . | + | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | 2  | 2  | .  | 2  | .  | .  | 5  | +  | .  | .  | +  | 10 | .  | +  | +  | +  | .  | 2  | +   | +   | II  | IV  |     |
| <i>Peucedanum vaginatum</i>      | + | + | +  | .  | .  | . | +  | + | + | .  | .  | .  | .  | .  | .  | .  | .  | 2  | +  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | +  | +  | .  | .  | +  | +  | .  | +  | .  | .  | +  | .  | +  | +  | +   | +   | +   | II  | III |
| <i>Larix sibirica</i>            | . | 3 | .  | 3  | +  | . | .  | . | 7 | .  | .  | .  | +  | .  | .  | +  | +  | .  | 3  | .  | .  | .  | 2  | .  | .  | .  | .  | 3  | .  | +  | .  | +  | 10 | 3  | +  | .  | .  | .  | +  | .  | .  | +  | 11 | .   | II  | III |     |     |
| <i>Vicia cracca</i>              | . | . | .  | .  | .  | . | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | 3  | .  | .  | .  | 2  | .  | +  | .  | 7  | 8  | .  | .  | .  | 5  | .  | .   | +   | 2   | .   | III |
| <i>Thalictrum minus</i>          | + | + | .  | +  | .  | . | .  | . | . | .  | .  | +  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | 3  | 3  | .  | 5  | 5  | .  | .  | +  | 2  | .  | 2   | .   | 5   | II  | III |
| <i>Carex supina</i>              | 5 | 2 | 2  | 5  | 2  | . | +  | 2 | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | +  | 3  | .  | 10 | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | .  | +  | +  | .  | .  | .  | 5   | II  | II  |     |     |
| <i>Artemisia glauca</i>          | . | . | 2  | .  | .  | . | .  | . | + | .  | .  | +  | +  | .  | .  | .  | .  | 3  | 2  | +  | 2  | .  | 2  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | 2  | .  | .  | .  | .  | .  | .  | +   | II  | I   |     |     |
| <i>Veronica incana</i>           | + | + | +  | .  | .  | . | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | +  | 2  | +  | .  | .  | .  | .  | .  | .  | 3  | .  | .  | .  | 2  | +  | 3  | +  | .  | +  | .   | I   | II  |     |     |
| <i>Gentiana decumbens</i>        | + | + | +  | .  | +  | + | .  | . | . | .  | .  | +  | +  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | 2  | 2  | 3  | .  | +   | 2   | .   | II  | II  |

| Номер описания                  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a  | b  |   |
|---------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| <i>Carex caryophyllea</i>       | + | . | . | . | . | 5 | . | . | 2 | 7  | +  | .  | .  | .  | .  | 5  | 10 | +  | .  | .  | .  | .  | 7  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | . |
| <i>Stipa capillata</i>          | + | . | 3 | . | . | . | . | . | . | .  | .  | .  | 5  | .  | 5  | .  | .  | +  | .  | 5  | 3  | .  | 3  | 5  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |   |
| <i>Scorzonera radiata</i>       | + | 2 | + | . | . | + | + | . | + | .  | .  | 8  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | +  |   |
| <i>Adenophora lamarckii</i>     | . | + | . | + | + | . | + | . | . | .  | .  | .  | .  | .  | .  | +  | +  | +  | .  | 2  | .  | .  | .  | .  | .  | +  | .  | .  | +  | .  | +  | .  | +  | .  | 4  | +  | .  | .  | .  | .  | .  | .  | .  | +  | II | II |    |   |
| <i>Ranunculus polyanthemus</i>  | + | + | . | + | + | . | + | . | . | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |    |   |
| <i>Dianthus superbus</i>        | + | . | . | . | . | + | . | . | . | .  | .  | .  | .  | +  | .  | +  | +  | +  | .  | .  | +  | +  | .  | .  | +  | .  | .  | .  | 5  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | II | I  |    |   |
| <i>Spiraea hypericifolia</i>    | + | + | . | . | . | . | . | + | + | .  | +  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |    |   |
| <i>Helictotrichon pubescens</i> | . | . | . | + | . | + | + | . | . | .  | .  | .  | 5  | .  | 2  | .  | .  | .  | .  | .  | 5  | 3  | .  | .  | .  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | II | +  |    |   |
| <i>Hieracium virosum</i>        | + | + | + | . | . | . | . | . | + | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |   |
| <i>Campanula glomerata</i>      | + | . | . | . | . | . | + | . | . | .  | .  | +  | .  | +  | .  | +  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | .  | .  | .  | .  | .  | +  | +  | .  | 2  | .  | +  | .  | .  | II | II |    |   |
| <i>Artemisia macrantha</i>      | . | . | . | 7 | 2 | 2 | + | . | . | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | 2  | .  | .  | .  | .  | 5  | +  | 2  | +  | .  | 3  | .  | .  | .  | 2  | II | II |   |
| <i>Thermopsis lanceolata</i>    | + | 2 | . | . | . | + | . | . | . | +  | .  | .  | .  | .  | .  | .  | .  | 5  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |    |   |
| <i>Astragalus adsurgens</i>     | 2 | 5 | . | . | . | . | . | + | . | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | 5  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | 3  | +  | I  | II |    |    |    |   |
| <i>Agrostis tuvinica</i>        | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 8  | 3  | .  | +  | .  | .  | +  | .  | .  | .  | .  | .  | +  | 3  | .  | II |    |   |
| <i>Silene repens</i>            | . | + | . | . | . | . | + | . | . | +  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | +  | +  | .  | 2  | .  | .  | I  | II |    |   |
| <i>Dianthus versicolor</i>      | + | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | +  | +  | .  | .  | +  | .  | +  | II |   |
| <i>Lilium pilosiusculum</i>     | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | +  | II |    |   |
| <i>Linaria acutiloba</i>        | + | . | + | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | +  | .  | .  | +  | I  | II |   |

**Примечание.** С I класс постоянства отмечен: *Abietinella abietina* (27–2, 29–2, 32–2, 33–36); *Achnatherum sibiricum* (16, 17, 21–3, 22–3, 24); *Aconitum volubile* (33–2, 44); *Agropyron cristatum* (43); *Amblynotus rupestris* (10, 17); *Androsace lehmanniana* (32); *Androsace septentrionalis* (20, 34); *Antennaria dioica* (25–2); *Artemisia commutata* (5, 9, 25); *A. dracuncululus* (12); *A. gmelinii* (24–2, 42–2); *A. phaeolepis* (32–2); *A. vulgaris* (44); *Astragalus propinquus* (39, 44); *A. suffruticosus* (3–2, 12–2); *Atragene sibirica* (14, 15); *Betula pendula* (2–2); *Bistorta major* (26–2, 39, 44–2); *Bistorta vivipara* (32–3); *Campanula dasyantha* (39); *Campanula rotundifolia* (40–2); *Caragana arborescens* (30–20, 31–5); *C. bungei* (36); *Carex amgunensis* (42–7); *C. duriuscula* (8); *C. obtusata* (32–5, 37–5); *Cerastium arvense* (3, 25, 29, 37–2); *Chamaenerion angustifolium* (12); *Comastoma tenellum* (32); *Cotoneaster melanocarpus* (1, 3–2, 9–2, 12–3, 190, 26–5, 31–5, 40–2); *C. uniflorus* (38–5); *Crepis tectorum* (32); *Dactylorhiza majalis* (12); *Delphinium crassifolium* (39, 41); *Draba nemorosa* (22, 34); *Elymus komarovii* (17); *E. mutabilis* (13, 425); *Elytrigia repens* (22, 24, 45–5); *Entodon schleicheri* (44–3); *Erigeron acris* (34, 38, 41); *E. eriocalyx* (26); *Euphorbia alpina* (15); *E. tshuiensis* (14, 28, 29, 35, 40); *Euphrasia parviflora* (34); *Festuca rubra* (320); *Galatella macrosciadia* (18, 20–2, 21, 22, 24, 36–5, 43, 45–7); *Gentianopsis barbata* (26, 32–2); *Geum aleppicum* (30, 31, 44, 45); *Gypsophila altissima* (27–2, 35–2, 36, 38); *Heracleum dissectum* (30, 33, 41, 44); *Hieracium echioides* (7); *Hordeum brevisubulatum* (31, 37, 44–5, 45–3); *Inula salicina* (13); *Iris bloudowii* (30); *I. potaninii* (11–2); *Koeleria cristata* (20, 25, 26, 27); *Lamium album* (37); *Lathyrus humilis* (14–2); *L. pannonicus* (20); *L. pisiformis* (22); *L. pratensis* (4, 7, 15, 22–3); *Leontopodium ochroleucum* (3, 26, 34–2, 38, 40–2); *Ligularia altaica* (39); *Lomatogonium carinthia* (32); *Medicago falcata* (2); *Noccaea cochleariformis* (3, 6, 10, 42); *Orostachys spinosa* (40); *Papaver nudicaule* (32); *Patrinia rupestris* (17); *P. sibirica* (32); *Pedicularis elata* (4–2, 5, 25–2, 27, 35); *P. sibirica* (39); *Phlox sibirica* (15); *Picea obovata* (33); *Pinus sibirica* (28); *Plantago urvillei* (1, 2); *Poa alpina* (42–5); *P. angustifolia* (2, 9, 22–5, 37–6, 44, 45–3); *Potentilla longifolia* (44); *P. sericea* (26, 31, 34, 40); *Pulsatilla ambigua* (32); *P. turczaninowii* (35); *Ranunculus*

*propinquus* (33–2); *Rhytidium rugosum* (28–5, 32–5, 35–3); *Rumex thyrsoiflorus* (10, 16–2, 17, 45–2); *Scutellaria scordiifolia* (2); *Seseli condensatum* (41–2); *Stellaria peduncularis* (32); *Stevenia cheiranthoides* (38, 40); *Taraxacum officinale* (29, 31, 33–2, 44); *T. species* (17, 35, 37–3); *Thalictrum simplex* (18, 33); *Thesium refractum* (3, 6); *Th. repens* (31–2, 33, 41–2); *Thymus serpyllum* (15); *Tragopogon orientalis* (41); *Trisetum sibiricum* (32); *Veronica krylovii* (7, 13, 14, 21, 22, 28, 29); *V.longifolia* (37); *Vicia amoena* (12, 19); *Viola dissecta* (32); *V. rupestris* (9, 28, 31, 33); *V. uniflora* (31)

**Локалитеты описаний:**

| Номер в таблице | Номер в фитоценоотеке | Район        | Локалитет                        | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|-----------------------|--------------|----------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 1               | 12425                 | Тандинский   | окр с.Бай-Хак                    | 880                 | 51.1638        | 94.4135         | 15.06.2002 | Макунина Н.И. |
| 2               | 12426                 | Тандинский   | окр с.Бай-Хак                    | 880                 | 51.1647        | 94.412          | 15.06.2002 | Макунина Н.И. |
| 3               | 12465                 | Улуг-Хемский | окр с.Чодура                     | 880                 | 51.3553        | 92.867          | 19.06.2002 | Макунина Н.И. |
| 4               | 12439                 | Улуг-Хемский | окр с.Хольчук, 14км на восток    | 1050                | 51.0718        | 93.4732         | 16.06.2002 | Макунина Н.И. |
| 5               | 12438                 | Улуг-Хемский | окр с.Хову-Аксы, 11км на запад   | 1060                | 51.0792        | 93.5168         | 16.06.2002 | Макунина Н.И. |
| 6               | 12414                 | Тандинский   | окр с.Балгазын                   | 930                 | 50.927         | 95.134          | 13.06.2002 | Макунина Н.И. |
| 7               | 35581                 | Каа-Хемский  | окр с.Ильинка, 12км на С-З       | 1170                | 51.178         | 95.3492         | 24.06.2005 | Макунина Н.И. |
| 8               | 12443                 | Улуг-Хемский | окр с.Хольчук, 13км на восток    | 1065                | 51.0762        | 93.4682         | 16.06.2002 | Макунина Н.И. |
| 9               | 12430                 | Тандинский   | окр с.Березовка                  | 900                 | 51.1843        | 94.2417         | 15.06.2002 | Макунина Н.И. |
| 10              | 12415                 | Тандинский   | окр с.Балгазын                   | 920                 | 50.9368        | 95.0905         | 13.06.2002 | Макунина Н.И. |
| 11              | 12448                 | Улуг-Хемский | окр с.Хольчук, 13км на восток    | 1100                | 51.075         | 93.4598         | 17.06.2002 | Макунина Н.И. |
| 12              | 12460                 | Улуг-Хемский | окр с.Арыг-Бажи                  | 925                 | 51.4467        | 93.1352         | 18.06.2002 | Макунина Н.И. |
| 13              | 35557                 | Каа-Хемский  | окр с.Бояровка, 18км на север    | 967                 | 51.7035        | 95.3843         | 21.06.2005 | Макунина Н.И. |
| 14              | 35573                 | Каа-Хемский  | окр с.Авыйган, 14км на С-З-З     | 1045                | 51.3568        | 95.4102         | 23.06.2005 | Макунина Н.И. |
| 15              | 35577                 | Каа-Хемский  | окр с.Авыйган, 12км на С-З-З     | 965                 | 51.341         | 95.4737         | 23.06.2005 | Макунина Н.И. |
| 16              | 12413                 | Тандинский   | окр с.Балгазын                   | 930                 | 50.9292        | 95.13           | 13.06.2002 | Макунина Н.И. |
| 17              | 12418                 | Тандинский   | окр с.Сосновка                   | 960                 | 50.9498        | 94.9292         | 14.06.2002 | Макунина Н.И. |
| 18              | 12421                 | Тандинский   | окр с.Сосновка                   | 1065                | 51.0902        | 94.6087         | 14.06.2002 | Макунина Н.И. |
| 19              | 12466                 | Улуг-Хемский | окр с.Чодура                     | 880                 | 51.3553        | 92.8667         | 19.06.2003 | Макунина Н.И. |
| 20              | 8267                  | Пий-Хемский  | окр с.Суш                        | 890                 | 52.02565       | 94.12911        | 02.07.2018 | Макунина Н.И. |
| 21              | 35556                 | Каа-Хемский  | окр с.Бояровка, 18км на север    | 990                 | 51.705         | 95.3833         | 21.06.2005 | Макунина Н.И. |
| 22              | 35553                 | Каа-Хемский  | окр с.Бояровка, 23км на север    | 995                 | 51.7282        | 95.4257         | 21.06.2005 | Макунина Н.И. |
| 23              | 12416                 | Тандинский   | окр с.Сосновка                   | 960                 | 50.9702        | 94.9918         | 14.06.2002 | Макунина Н.И. |
| 24              | 35585                 | Тандинский   | окр с.Владимировка, 6км на Ю-Ю-З | 940                 | 50.9402        | 95.263          | 24.06.2005 | Макунина Н.И. |
| 25              | 12437                 | Улуг-Хемский | окр с.Хову-Аксы, 11км на запад   | 1060                | 51.0767        | 93.5165         | 16.06.2002 | Макунина Н.И. |
| 26              | 7053                  | Овюрский     | окр с.Дус-Даг                    | 1996                | 50.98136       | 92.71306        | 05.08.2009 | Макунина Н.И. |

| Номер в таблице | Номер в фитоценологе | Район            | Локалитет                     | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|----------------------|------------------|-------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 27              | 36710                | Бай-Тайгинский   | окр оз.Кара-Холь              | 1634                | 51.3578        | 89.4278         | 06.07.2006 | Макунина Н.И. |
| 28              | 8314                 | Бай-Тайгинский   | окр оз.Кара-Холь              | 1528                | 51.34331       | 89.45094        | 10.07.2018 | Макунина Н.И. |
| 29              | 8320                 | Бай-Тайгинский   | окр оз.Кара-Холь              | 1559                | 51.28498       | 89.41944        | 11.07.2018 | Макунина Н.И. |
| 30              | 8428                 | Барун-Хемчикский | Р.Улуг-Кангылыг (Ак-Суг)      | 1496                | 51.52537       | 90.12464        | 04.07.2019 | Макунина Н.И. |
| 31              | 36677                | Бай-Тайгинский   | окр с.Кара-Холь               | 1320                | 51.2817        | 89.7303         | 03.07.2006 | Макунина Н.И. |
| 32              | 7672                 | Овюрский         | Устье Р.Арзайты               | 1900                | 50.48417       | 90.73893        | 14.08.2014 | Макунина Н.И. |
| 33              | 8342                 | Бай-Тайгинский   | окр с.Кара-Холь               | 1423                | 51.24567       | 89.69242        | 13.07.2018 | Макунина Н.И. |
| 34              | 7679                 | Дзун-Хемчикский  | окр с.Хондергей               | 1620                | 50.90338       | 91.76035        | 15.08.2014 | Макунина Н.И. |
| 35              | 36715                | Бай-Тайгинский   | окр оз.Кара-Холь              | 1492                | 51.3582        | 89.4653         | 08.07.2006 | Макунина Н.И. |
| 36              | 12561                | Барун-Хемчикский | окр с.Кызыл-Тайга, 4км на Ю-В | 1430                | 51.2923        | 90.2195         | 25.06.2002 | Макунина Н.И. |
| 37              | 36713                | Бай-Тайгинский   | окр оз.Кара-Холь              | 1470                | 51.359         | 89.4647         | 08.07.2006 | Макунина Н.И. |
| 38              | 5964                 | Эрзинский        | окр с.Нарын                   | 1958                | 50.2287        | 96.28551        | 25.07.2009 | Макунина Н.И. |
| 39              | 5968                 | Эрзинский        | окр с.Нарын                   | 1971                | 50.22662       | 96.26488        | 25.07.2009 | Макунина Н.И. |
| 40              | 7066                 | Овюрский         | окр с.Дус-Даг                 | 1960                | 50.98874       | 92.70613        | 06.08.2009 | Макунина Н.И. |
| 41              | 5970                 | Эрзинский        | окр с.Нарын                   | 1733                | 50.14303       | 96.1139         | 25.07.2009 | Макунина Н.И. |
| 42              | 36563                | Эрзинский        | окр с.Нарын, 30км на восток   | 1860                | 50.1775        | 96.1762         | 21.06.2006 | Макунина Н.И. |
| 43              | 7030                 | Тес-Хемский      | окр с.Холь-Оожу               | 1642                | 50.79127       | 94.34834        | 02.08.2009 | Макунина Н.И. |
| 44              | 8338                 | Бай-Тайгинский   | окр с.Кара-Холь               | 1416                | 51.24354       | 89.68855        | 12.07.2018 | Макунина Н.И. |
| 45              | 12560                | Барун-Хемчикский | окр с.Кызыл-Тайга, 4км на Ю-В | 1460                | 51.2942        | 90.217          | 25.06.2002 | Макунина Н.И. |

Таблица 2

Ассоциации *Pulsatillo turczaninovii*–*Caricetum pediformis* (1-30) и *Artemisia santolinifoliae*–*Helictotrichetum schellianum* (31-45)

Table 2

Associations *Pulsatillo turczaninovii*–*Caricetum pediformis* (1-30) and *Artemisia santolinifoliae*–*Helictotrichetum schellianum* (31-45)

| Табличный номер  | 1   | 2     | 3     | 4     | 5     | 6     | 7     | 8    | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16   | 17   | 18   | 19   | 20   | 21    | 22    | 23   | 24   | 25    | 26    | 27    | 28    | 29    | 30    | 31   | 32   | 33    | 34   | 35    | 36   | 37   | 38   | 39    | 40   | 41   | 42    | 43   | 44   | 45    | a | b   |     |   |
|--|---|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|--|------|-------|------|-------|------|------|------|-------|------|------|-------|------|------|-------|---|-----|-----|---|
| Ассоциация   | <i>Pulsatillo turczaninovii</i> – <i>Caricetum pediformis</i> (a) |       |       |       |       |       |       |      |       |       |       |       |       |       |       |      |      |      |      |      |       |       |      |      |       |       |       |       |       |       | <i>Artemisia santolinifoliae</i> – <i>Helictotrichetum schellianum</i> (b) |      |       |      |       |      |      |      |       |      |      |       |      |      |       |   |     |     |   |
| Номер в фитоценологе   | 12417   | 12440 | 12456 | 35579 | 12514 | 12501 | 35590 | 2518 | 12464 | 12522 | 35551 | 35570 | 35575 | 35604 | 35608 | 5137 | 8364 | 8882 | 8891 | 8897 | 12517 | 12519 | 8889 | 8356 | 12455 | 12459 | 12462 | 12483 | 12419 | 35592 | 37417  | 7618 | 37409 | 8304 | 36687 | 7624 | 7629 | 7089 | 36686 | 8433 | 8840 | 37419 | 8449 | 7054 | 36717 |   |     |     |   |
| Высота над ур.м.   | 960   | 1050  | 910   | 1213  | 1260  | 1240  | 960   | 1020 | 870   | 1260  | 1010  | 1090  | 950   | 1080  | 970   | 1006 | 1139 | 842  | 986  | 1048 | 1200  | 1260  | 905  | 1293 | 890   | 930   | 910   | 1260  | 1085  | 1023  | 1854   | 1804 | 1985  | 1502 | 1476  | 1812 | 1828 | 2050 | 1490  | 1388 | 2137 | 1853  | 1378 | 1948 | 1415  |   |     |     |   |
| Экспозиция   | 45  | 180   | 135   | 180   | 90    | 270   | 212   | 90   |       | 130   | 210   | 110   | 170   | 180   | 110   | 80   | 330  | 20   |      | 90   | 135   | 30    | 300  | 135  | 135   | 270   | 90    | 250   |       | 45    | 120  | 20   | 340   | 50   | 100   | 150  | 50   | 90   | 60    | 100  |      | 190   | 20   |      |       |   |     |     |   |
| Крутизна   | 3   | 10    | 12    | 15    | 7     | 7     | 7     | 15   |       | 22    | 14    | 5     | 25    | 15    | 25    | 20   | 5    | 7    |      | 5    | 5     | 3     | 7    | 5    | 5     | 10    | 7     | 20    |       | 5     | 7  | 3    | 7     | 15   | 3     | 30   | 10   | 10   | 5     | 7    |      | 35    | 35   |      |       |   |     |     |   |
| III кустарников  | 10  |       |       |       |       |       |       |      |       |       |       |       |       | 40    |       |      | 20   | 20   |      | 20   |       | 10    |      |      |       | 10    |       |       |       |       | 10   |      |       | 5    |       |      |      | 10   |       | 30   |      |       |      | 10   |       |   |     |     |   |
| III травостоя  | 50  | 55    | 80    | 70    | 70    | 75    | 70    | 60   | 60    | 80    | 70    | 70    | 80    | 60    | 70    | 60   | 60   | 90   | 80   | 80   | 75    | 65    | 60   | 70   | 65    | 75    | 70    | 80    | 90    | 70    | 60   | 85   | 70    | 70   | 80    | 85   | 70   | 70   | 80    | 70   | 60   | 70    | 80   | 75   | 80    |   |     |     |   |
| Число видов  | 33  | 39    | 29    | 34    | 38    | 32    | 38    | 32   | 38    | 29    | 31    | 25    | 22    | 37    | 26    | 31   | 31   | 31   | 30   | 30   | 36    | 28    | 34   | 25   | 24    | 36    | 27    | 34    | 39    | 49    | 35   | 34   | 37    | 28   | 35    | 33   | 35   | 34   | 33    | 37   | 32   | 25    | 34   | 35   | 41    |   |     |     |   |
| Д.в. асс. <i>Pulsatillo turczaninovii</i> – <i>Caricetum pediformis</i>          |   |       |       |       |       |       |       |      |       |       |       |       |       |       |       |      |      |      |      |      |       |       |      |      |       |       |       |       |       |       |  |      |       |      |       |      |      |      |       |      |      |       |      |      |       |   |     |     |   |
| <i>Stipa capillata</i>   | 15  | +     | 10    | 5     | 2     | 20    | 5     | 5    | 5     | 15    | 15    | 10    | 30    | +     | 7     | 7    | 3    | 30   | 20   | 15   | 3     | 5     | 5    | 5    | 10    | 5     | 7     | 35    | .     | 3     | .  | .    | .     | .    | .     | .    | .    | .    | .     | 2    | .    | .     | .    | .    | .     | . | .   | V   | + |
| <i>Bupleurum scorzoniferolium</i>  | 1   | 2     | 2     | 2     | .     | 2     | +     | +    | +     | .     | +     | .     | .     | +     | .     | 2    | +    | 7    | 2    | 2    | .     | .     | +    | .    | 2     | +     | 2     | +     | +     | +     | +  | .    | .     | .    | .     | +    | .    | .    | .     | .    | .    | .     | .    | .    | .     | . | .   | IV  | I |
| <i>Stipa pennata</i>   | 5   | 15    | 20    | 7     | 7     | 5     | +     | .    | 17    | .     | 3     | +     | .     | 12    | 12    | +    | .    | 5    | 3    | .    | 5     | .     | 7    | .    | 10    | 20    | 20    | .     | 2     | 5     | .  | .    | .     | .    | .     | .    | .    | .    | .     | .    | .    | .     | .    | .    | .     | . | .   | IV  | . |
| <i>Scabiosa ochroleuca</i>   | 1   | 2     | +     | +     | +     | 2     | +     | +    | +     | 2     | .     | .     | +     | 2     | .     | .    | .    | +    | 2    | 3    | +     | .     | +    | 3    | 2     | .     | .     | +     | +     | .     | .  | .    | .     | .    | .     | .    | .    | .    | .     | .    | .    | .     | .    | .    | .     | . | .   | IV  | . |
| <i>Artemisia glauca</i>  | 2   | +     | +     | +     | 2     | .     | 2     | .    | .     | 6     | +     | 14    | 4     | 5     | +     | 2    | +    | 7    | .    | 7    | +     | 2     | .    | 3    | .     | +     | .     | 5     | .     | 2     | .  | .    | .     | .    | .     | .    | .    | .    | .     | .    | .    | .     | .    | .    | .     | . | .   | IV  | . |
| <i>Spiraea hypericifolia</i>   | 1   | .     | .     | .     | 5     | .     | .     | .    | +     | +     | +     | +     | .     | 2     | 30    | .    | .    | +    | .    | .    | 10    | .     | +    | .    | 3     | .     | .     | .     | +     | .     | .  | .    | .     | .    | .     | .    | .    | .    | .     | .    | .    | .     | .    | .    | .     | . | .   | III | . |
| <i>Pulsatilla patens</i>   | 2   | +     | 3     | 15    | +     | .     | .     | 3    | 2     | .     | 2     | .     | .     | .     | .     | .    | 5    | .    | +    | .    | .     | +     | .    | .    | 5     | +     | +     | +     | 7     | 2     | .  | +    | .     | .    | .     | .    | .    | .    | .     | .    | .    | .     | .    | .    | .     | . | III | I   |   |
| Д.в. асс. <i>Artemisia santolinifoliae</i> – <i>Helictotrichetum schellianum</i> |   |       |       |       |       |       |       |      |       |       |       |       |       |       |       |      |      |      |      |      |       |       |      |      |       |       |       |       |       |       |  |      |       |      |       |      |      |      |       |      |      |       |      |      |       |   |     |     |   |
| <i>Artemisia santolinifolia</i>  | .   | .     | .     | +     | .     | .     | .     | .    | .     | +     | 5     | .     | .     | .     | .     | .    | .    | .    | 3    | .    | .     | .     | .    | .    | .     | .     | .     | .     | .     | .     | .  | 3    | 3     | 3    | 5     | .    | 20   | 2    | 2     | +    | 10   | 2     | 7    | 8    | 5     | . | I   | V   |   |
| <i>Agrostis tuvinica</i>   | .   | .     | .     | .     | .     | .     | .     | .    | .     | .     | .     | .     | .     | .     | .     | .    | .    | .    | .    | +    | .     | .     | .    | .    | .     | .     | .     | .     | .     | .     | .  | 4    | 4     | .    | 5     | 5    | .    | 2    | .     | 14   | 20   | +     | 6    | 15   | .     | 5 | +   | IV  |   |
| <i>Leontopodium ochroleucum</i>  | .   | .     | +     | .     | .     | .     | .     | .    | .     | .     | .     | .     | .     | .     | .     | .    | .    | .    | .    | .    | .     | .     | .    | .    | .     | .     | .     | .     | .     | .     | 2  | +    | +     | .    | .     | .    | 8    | 5    | .     | .    | .    | +     | .    | 3    | +     | . | III |     |   |
| <i>Larix sibirica</i>  | .   | .     | .     | .     | .     | .     | .     | .    | .     | .     | .     | .     | .     | .     | .     | .    | .    | .    | .    | .    | .     | .     | .    | .    | .     | .     | .     | .     | .     | .     | +  | +    | +     | .    | +     | 30   | +    | .    | +     | 10   | .    | +     | .    | .    | 3     | . | IV  |     |   |
| <i>Potentilla matsukana</i>  | .   | .     | .     | .     | .     | .     | .     | .    | .     | .     | .     | .     | .     | .     | .     | .    | .    | .    | .    | .    | .     | .     | .    | .    | .     | .     | .     | .     | .     | .     | +  | +    | +     | .    | 5     | .    | .    | .    | .     | +    | +    | .     | +    | .    | .     | . | .   | III |   |
| Д.в. пор. <i>Helictotrichetalia schelliani</i>                                   |   |       |       |       |       |       |       |      |       |       |       |       |       |       |       |      |      |      |      |      |       |       |      |      |       |       |       |       |       |       |  |      |       |      |       |      |      |      |       |      |      |       |      |      |       |   |     |     |   |

| Табличный номер                              | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45  | a   | b   |    |     |  |
|--|----|----|----|----|----|----|----|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|----|-----|--|
| <i>Coluria geoides</i>                       | 4  | +  | .  | 7  | 2  | 2  | 8  | .  | . | 3  | +  | .  | .  | 7  | .  | 3  | 7  | 2  | 5  | +  | 3  | 2  | .  | 8  | .  | .  | 3  | .  | 2  | 5  | +  | 8  | 2  | 5  | .  | +  | +  | 2  | 5  | .  | 8  | .  | .  | .  | +   | IV  | IV  |    |     |  |
| <i>Helictotrichon schellianum</i>            | 1  | +  | +  | .  | .  | .  | +  | .  | + | .  | +  | .  | +  | +  | .  | +  | +  | .  | .  | +  | +  | .  | .  | +  | +  | .  | .  | .  | .  | 2  | 2  | 2  | .  | .  | 7  | 5  | 7  | 7  | 2  | 20 | +  | 3  | +  | 2  | 3   | III | V   |    |     |  |
| <i>Schizonepeta multifida</i>                | 1  | 2  | +  | 2  | 5  | 5  | 2  | 2  | . | 2  | 2  | +  | .  | .  | +  | +  | 3  | 3  | +  | +  | 2  | 5  | .  | 5  | .  | +  | 2  | 2  | 3  | +  | 3  | +  | 10 | 2  | 5  | +  | 3  | 5  | 7  | 2  | .  | 2  | 5  | 2  | +   | V   | V   |    |     |  |
| <i>Aster alpinus</i>                         | 1  | 2  | .  | +  | 2  | 2  | 2  | +  | . | +  | +  | .  | .  | .  | .  | .  | 2  | .  | .  | +  | 2  | 2  | .  | 7  | .  | .  | .  | .  | +  | +  | +  | 10 | 3  | 7  | 2  | 2  | 5  | 2  | 5  | 5  | 8  | +  | +  | 12 | 3   | III | V   |    |     |  |
| <i>Carex pediformis</i>                      | 5  | 3  | 12 | 5  | 10 | 3  | 5  | 7  | + | 5  | 15 | 20 | 5  | 7  | 12 | 7  | 7  | 5  | 3  | 10 | 3  | 5  | 5  | 7  | 12 | 10 | 7  | 7  | 7  | 7  | 3  | 10 | 15 | 12 | 6  | 10 | 15 | 7  | 3  | 2  | 12 | 7  | 3  | 17 | 7   | V   | V   |    |     |  |
| <i>Helictotrichon altaicum</i>               | 12 | 3  | +  | 3  | 10 | 10 | 12 | 10 | 2 | 25 | 3  | 3  | 5  | 3  | 7  | 25 | 15 | 20 | 20 | 7  | 22 | 20 | 10 | 20 | 7  | 13 | +  | 10 | 7  | 8  | .  | 30 | 7  | .  | .  | 25 | 3  | 2  | +  | .  | 20 | .  | .  | 3  | 20  | V   | III |    |     |  |
| <i>Pulsatilla turczaninovii</i>              | 1  | +  | 2  | .  | 2  | +  | +  | +  | 5 | .  | 2  | .  | .  | +  | 2  | 2  | .  | .  | .  | .  | +  | +  | .  | .  | 7  | 3  | 3  | 2  | 3  | 2  | 2  | 2  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | +  | IV  | II  |     |    |     |  |
| Д.в. класса <i>Cleistogenetea squarrosae</i> |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |    |     |  |
| <i>Potentilla acaulis</i>                    | .  | .  | .  | .  | 3  | +  | +  | +  | + | +  | +  | .  | +  | +  | +  | +  | .  | .  | .  | .  | 2  | 2  | +  | +  | +  | .  | .  | .  | .  | +  | 3  | .  | +  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .   | .   | III | II |     |  |
| <i>Heteropappus altaicus</i>                 | .  | .  | +  | .  | .  | .  | +  | .  | + | .  | .  | +  | +  | +  | .  | .  | .  | .  | +  | .  | +  | +  | 3  | .  | +  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | II | .   |  |
| <i>Caragana pygmaea</i>                      | 10 | 2  | 3  | .  | 2  | 3  | 5  | .  | + | +  | 10 | .  | 5  | 2  | 10 | 2  | 50 | 20 | 20 | .  | .  | 2  | 10 | +  | .  | 7  | 2  | 3  | +  | 3  | .  | +  | .  | .  | +  | .  | .  | 10 | .  | .  | .  | .  | .  | 7  | IV  | II  |     |    |     |  |
| <i>Festuca valesiaca</i>                     | 2  | +  | +  | +  | 3  | 2  | 3  | .  | 2 | 3  | .  | .  | .  | .  | 2  | .  | .  | 3  | .  | 3  | 3  | 3  | 5  | 5  | .  | .  | 2  | 3  | .  | 5  | +  | .  | 7  | 10 | 5  | 3  | .  | 15 | 3  | 3  | .  | 8  | 3  | 3  | III | IV  |     |    |     |  |
| <i>Potentilla bifurca</i>                    | 1  | +  | +  | +  | +  | +  | +  | .  | + | 2  | +  | 2  | +  | +  | 3  | 2  | +  | 3  | 3  | 5  | +  | +  | 2  | .  | .  | +  | .  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | 3  | +   | +   | V   | V  |     |  |
| <i>Poa botryoides</i>                        | .  | +  | .  | 15 | 2  | 5  | 5  | 7  | 2 | .  | 7  | 5  | 5  | 9  | 12 | +  | 15 | +  | 3  | +  | 2  | .  | 5  | 3  | .  | .  | .  | 3  | 3  | 3  | 15 | 3  | 8  | .  | 3  | 5  | .  | 5  | 20 | 3  | 3  | 12 | 7  | 3  | 5   | IV  | V   |    |     |  |
| <i>Artemisia frigida</i>                     | 6  | 2  | .  | .  | .  | 2  | +  | 2  | 2 | .  | +  | .  | .  | 2  | 2  | +  | .  | +  | +  | +  | .  | 10 | +  | .  | .  | .  | .  | +  | +  | +  | 3  | +  | +  | 2  | 2  | +  | 5  | .  | +  | 2  | +  | .  | .  | 2  | +   | III | IV  |    |     |  |
| <i>Koeleria cristata</i>                     | .  | .  | 2  | 3  | 2  | 2  | 3  | 7  | 2 | +  | +  | +  | 3  | .  | .  | +  | +  | .  | .  | .  | 2  | .  | 5  | 3  | 3  | .  | .  | .  | 2  | 2  | 7  | 2  | 3  | .  | +  | 3  | 5  | 5  | .  | 3  | 2  | 5  | 5  | 20 | .   | IV  | IV  |    |     |  |
| <i>Veronica incana</i>                       | .  | +  | 2  | +  | 2  | 2  | 5  | 3  | 3 | +  | .  | +  | 2  | 2  | .  | +  | +  | +  | .  | +  | 2  | 2  | 5  | 2  | +  | +  | +  | .  | .  | 2  | 3  | +  | +  | 3  | 3  | .  | +  | 3  | 2  | 20 | .  | +  | 3  | +  | +   | IV  | V   |    |     |  |
| <i>Dianthus versicolor</i>                   | 1  | +  | .  | .  | +  | +  | +  | +  | + | .  | .  | .  | +  | .  | +  | +  | +  | +  | .  | +  | +  | +  | +  | +  | +  | .  | +  | .  | +  | .  | 2  | +  | +  | .  | +  | +  | 2  | +  | 2  | .  | .  | .  | +  | +  | IV  | IV  |     |    |     |  |
| <i>Galium verum</i>                          | 2  | +  | 2  | 2  | +  | 2  | 3  | +  | + | +  | +  | +  | 5  | 2  | 3  | 2  | +  | +  | +  | +  | 2  | +  | +  | +  | 2  | 2  | +  | +  | 2  | 2  | +  | 3  | +  | 5  | 3  | 2  | +  | 2  | 3  | +  | 2  | +  | +  | .  | 2   | V   | V   |    |     |  |
| <i>Gentiana decumbens</i>                    | 1  | +  | .  | .  | .  | 2  | +  | +  | + | .  | .  | +  | .  | +  | .  | .  | +  | +  | +  | .  | .  | .  | .  | +  | +  | +  | +  | +  | +  | +  | 3  | 2  | 2  | .  | .  | +  | 3  | 2  | .  | .  | .  | 2  | .  | 3  | .   | III | III |    |     |  |
| <i>Oxytropis strobilacea</i>                 | 1  | +  | 2  | .  | +  | +  | .  | .  | + | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | 2  | +  | .  | +  | .  | 2  | +  | +  | +  | .  | .  | .  | 2  | +  | +  | .  | .  | .  | 2  | +  | +  | 7  | +  | +  | III | III |     |    |     |  |
| <i>Phleum phleoides</i>                      | 1  | +  | .  | 7  | +  | .  | 3  | 5  | + | 3  | 7  | +  | 5  | 3  | 3  | 2  | 2  | 5  | 7  | 5  | 8  | .  | 3  | 2  | 2  | 3  | +  | 3  | +  | +  | .  | .  | .  | 10 | 2  | .  | .  | .  | 2  | +  | .  | .  | .  | .  | .   | V   | II  |    |     |  |
| <i>Phlomoïdes tuberosa</i>                   | 1  | 3  | .  | .  | +  | +  | 3  | 2  | + | 2  | .  | 3  | +  | +  | 3  | 2  | 3  | 7  | 3  | 5  | 2  | 2  | .  | .  | .  | 2  | .  | 2  | .  | 3  | .  | .  | .  | 2  | 2  | +  | .  | +  | 7  | .  | .  | .  | .  | +  | IV  | II  |     |    |     |  |
| <i>Galatella angustissima</i>                | .  | +  | .  | +  | +  | +  | .  | +  | . | +  | .  | +  | +  | +  | +  | 3  | +  | +  | 2  | +  | +  | +  | .  | .  | .  | +  | +  | .  | 2  | 3  | .  | .  | 8  | +  | .  | 2  | .  | .  | .  | .  | .  | +  | .  | .  | +   | IV  | II  |    |     |  |
| <i>Thalictrum foetidum</i>                   | 1  | .  | .  | .  | +  | .  | .  | .  | + | .  | .  | .  | .  | .  | .  | .  | +  | 5  | .  | .  | .  | +  | .  | +  | .  | .  | .  | +  | +  | +  | .  | +  | .  | +  | 3  | +  | .  | +  | .  | .  | .  | .  | +  | +  | +   | II  | III |    |     |  |
| <i>Tephrosia integrifolia</i>                | 1  | +  | .  | +  | .  | .  | .  | .  | . | +  | .  | .  | .  | +  | +  | 2  | +  | .  | .  | .  | +  | .  | .  | .  | +  | .  | .  | +  | .  | +  | .  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .   | II  | I   |    |     |  |
| <i>Artemisia tanacetifolia</i>               | 1  | 12 | .  | +  | +  | .  | .  | 2  | . | 2  | .  | 2  | .  | .  | .  | .  | .  | .  | +  | +  | +  | .  | .  | .  | 7  | .  | .  | .  | 2  | +  | .  | .  | 2  | .  | 3  | .  | .  | 2  | +  | +  | .  | +  | 3  | .  | 15  | III | III |    |     |  |
| <i>Bromopsis inermis</i>                     | 1  | +  | .  | .  | +  | 3  | 2  | .  | + | +  | .  | 5  | 3  | .  | +  | .  | .  | .  | 5  | .  | +  | .  | +  | .  | .  | .  | .  | 2  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | III | .   |    |     |  |
| <i>Peucedanum vaginatum</i>                  | 1  | +  | .  | +  | .  | +  | +  | .  | . | .  | .  | .  | +  | +  | .  | +  | +  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | +  | 2  | +  | +  | +  | +  | +  | .  | +  | +  | +  | .  | +  | +  | +   | II  | V   |    |     |  |
| <i>Astragalus adsurgens</i>                  | .  | +  | .  | .  | .  | 2  | +  | .  | + | +  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | 2  | +  | +  | .  | .  | .  | .  | 2  | +  | +  | .  | 15 | 2  | +  | 10 | +  | 3  | +  | 5  | +  | .  | .  | 3  | 3  | +   | II  | IV  |    |     |  |
| <i>Pentaphylloides fruticosa</i>             | .  | .  | .  | .  | .  | .  | .  | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | 2  | +  | .  | .  | +  | +  | 2  | .  | .  | 30 | 8  | +  | .  | .   | .   | III |    |     |  |
| <i>Bupleurum multinerve</i>                  | .  | .  | .  | .  | +  | .  | .  | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | 5  | .  | 2  | .  | .  | .  | .  | .  | +  | .  | +  | .  | 7   | +   | 5   | +  | III |  |



| Табличный номер                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a  | b  |    |   |    |
|---------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|
| <i>Geranium transbaicalicum</i> | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | 3  | .  | .  | .  | .  | .  | .  | 2  | +  | .  | 2  | .  | .  | . | II |
| <i>Thymus serpyllum</i>         | . | . | + | . | 2 | . | + | 5 | 5 | .  | 2  | .  | .  | +  | .  | .  | .  | .  | .  | 2  | 2  | .  | .  | .  | +  | 2  | .  | .  | 2  | .  | .  | 3  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | II | I  |   |    |
| <i>Vicia multicaulis</i>        | . | 3 | 5 | 2 | . | . | . | + | . | +  | +  | .  | .  | .  | +  | 5  | .  | .  | .  | .  | .  | .  | .  | .  | +  | 2  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |   |    |
| <i>Iris ruthenica</i>           | 2 | . | . | + | 7 | . | . | + | 2 | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | 2  | +  | .  | .  | .  | .  | .  | .  | 2  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | 2  | .  | .  | II | I  |    |   |    |
| <i>Polygala comosa</i>          | . | 2 | . | 2 | . | + | . | . | . | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | +  | 2  | +  | +  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 10 | II | I  |   |    |
| <i>Lychnis sibirica</i>         | 1 | + | . | + | + | + | . | . | . | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |    |   |    |
| <i>Fragaria viridis</i>         | . | + | . | 3 | . | . | . | . | . | 5  | +  | .  | .  | 2  | +  | +  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |    |   |    |
| <i>Kitagawia baicalensis</i>    | . | . | . | . | + | . | . | . | + | .  | +  | +  | +  | +  | .  | .  | .  | .  | .  | .  | +  | .  | 3  | .  | .  | +  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | II | I |    |
| <i>Carex supina</i>             | . | . | 5 | . | . | . | . | 5 | . | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | +  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |    |   |    |
| <i>Artemisia commutata</i>      | . | . | 2 | . | + | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 6  | .  | .  | .  | 2  | 2  | 4  | .  | 2  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | 2  | .  | .  | +  | +  | .  | II | II |    |   |    |
| <i>Thalictrum petaloideum</i>   | 1 | + | . | + | . | . | + | . | . | .  | .  | .  | .  | 2  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II | .  |    |   |    |
| <i>Aconogonon alpinum</i>       | . | . | . | 2 | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | 2  | .  | .  | 2  | .  | 4  | 2  | 4  | +  | II |    |   |    |
| <i>Myosotis imitata</i>         | . | . | . | . | . | . | . | . | . | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | 2  | .  | .  | .  | .  | .  | +  | .  | 3  | .  | 2  | +  | II |    |   |    |
| <i>Rhytidium rugosum</i>        | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | 10 | .  | .  | 5  | 10 | .  | .  | .  | 20 | .  | II |    |   |    |
| <i>Thalictrum minus</i>         | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | .  | +  | .  | .  | 3  | .  | .  | .  | .  | .  | 2  | .  | +  | .  | +  | II |    |    |   |    |
| <i>Cerastium arvense</i>        | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | +  | .  | .  | 2  | .  | 3  | .  | .  | II |    |    |   |    |
| <i>Poa angustifolia</i>         | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | 3  | +  | .  | .  | .  | .  | +  | .  | +  | .  | +  | II |    |   |    |
| <i>Potentilla multifida</i>     | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | 2  | +  | .  | .  | +  | .  | .  | II |    |    |   |    |
| <i>Potentilla sericea</i>       | . | . | . | . | . | + | . | + | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | +  | .  | 2  | .  | +  | II |    |   |    |
| <i>Silene repens</i>            | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | +  | .  | .  | +  | .  | .  | +  | .  | II |   |    |
| <i>Artemisia phaeolepis</i>     | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | .  | .  | +  | .  | .  | +  | .  | II |   |    |
| <i>Berberis sibirica</i>        | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 7  | .  | +  | +  | .  | 2  | .  | .  | .  | .  | .  | .  | II |    |   |    |
| <i>Carex obtusata</i>           | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | 3  | .  | .  | 2  | .  | .  | 5  | .  | .  | .  | II |    |   |    |
| <i>Gentiana macrophylla</i>     | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | + | II |

**Приложение. С I классом постоянства отмечены:** *Abietinella abietina* (350, 40 - 28); *Achillea asiatica* (19 - 2, 34 - 2); *Achnatherum sibiricum* (11 - 6, 16 - 6, 230, 30 - 2); *Aconitum anthoroideum* (28 - 2); *Aconitum barbatum* (8 - 4); *Adenophora coronopifolia* (17 - 2, 20 - 2, 43); *A. lamarckii* (40); *Agropyron cristatum* (18 - 2, 33 - 2, 38 - 2); *Allium anisopodium* (7 - 2); *A. clathratum* (33, 38, 44); *A. rubens* (16); *A. schischkinii* (23); *A. senescens* (28); *A. strictum* (14 - 2, 16, 17, 20, 25 - 2, 32, 41, 42); *A. tuvinicum* (36 - 2, 37); *Alyssum obovatum* (18, 23, 37 - 2); *Androsace maxima* (44); *Androsace septentrionalis* (4, 5 - 2, 11, 23, 24 - 2, 37, 40, 41); *Anemone sylvestris* (30 - 2); *Artemisia gmelinii* (20); *A. macrantha* (45); *A. obtusiloba* (9, 12, 13 - 5, 41); *A. pycnorhiza* (31); *A. scoparia* (40); *Astragalus laguroides* (31 - 2); *A. melilotoides* (9, 26); *A. multicaulis* (31, 37 - 3, 41); *Bupleurum bicaule* (14, 37 - 3, 38); *Calamagrostis epigeios* (3, 8, 11 - 3, 12, 23, 27); *Campanula glomerata* (18, 28); *Caragana bungei* (210, 36 - 3); *Carex duriuscula* (5 - 2, 7, 28, 41 - 5, 43 - 3); *Clausia aprica* (30, 37, 38); *Cotoneaster melanocarpus* (5, 18, 30); *Cotoneaster uniflorus* (33 - 2, 34, 41); *Dracocephalum nutans* (15); *Elymus gmelinii* (18, 20 - 2, 43); *Elytrigia geniculata* (39 - 2, 40); *Elytrigia repens* (28 - 2); *Ephedra monosperma* (8); *Erigeron acris* (32); *Eritrichium pectinatum* (14); *Euphorbia tshuiensis* (3, 21, 26, 30, 45); *Galatella macroscladia* (12, 13, 14 - 2, 15, 17, 30 - 3); *Galium boreale* (30, 45); *Gentiana*

*squarrosa* (40); *Gentianella amarella* (24, 34, 35, 39); *Glycyrrhiza uralensis* (9 - 2); *Goniolimon speciosum* (8); *Gypsophila altissima* (28); *Hieracium echinoides* (26); *Hieracium umbellatum* (26, 29); *Hieracium virosum* (11, 26, 27, 29); *Iris bloudowii* (35); *I. potaninii* (3, 28, 29, 44); *Juniperus sibirica* (41); *Lactuca sibirica* (23); *Lathyrus pannonicus* (15, 30); *Leymus dasystachys* (7 - 2, 9, 28, 45 - 2); *Linaria acutiloba* (20, 28); *L. altaica* (31); *Lupinaster pentaphyllus* (1, 6, 29); *Medicago falcata* (19); *Noccaea cochleariformis* (23); *Onobrychis arenaria* (3, 9, 17, 26, 35); *Orostachys spinosa* (9, 37, 38, 44); *Oxytropis species* (44); *Pachyneurum grandiflorum* (45); *Pedicularis achilleifolia* (38); *Plantago depressa* (8); *Plantago urvillei* (20, 40, 43); *Polygala sibirica* (14, 30); *Potentilla longifolia* (23, 24 - 2); *P. nudicaulis* (20, 34); *P. tanacetifolia* (38); *P. tericholica* (2); *Pulsatilla ambigua* (30, 31); *Rheum compactum* (44); *Rosa acicularis* (4 - 3, 19, 26 - 3); *Rumex thyrsoiflorus* (41); *Saussurea pricei* (7 - 2); *Scorzonera radiata* (33); *Scutellaria scordiifolia* (7, 18); *Sedum hybridum* (38); *Serratula centauroides* (23 - 2); *S. marginata* (30 - 2); *Sibbaldianthe adpressa* (44); *Silene borysthenica* (23); *S. graminifolia* (5, 44); *S. viscosa* (15); *Spiraea chamaedrifolia* (4 - 2, 18, 30 - 3, 33 - 2, 36); *Stevenia cheiranthoides* (6, 14, 27, 44); *Taraxacum erythrosperm* (7 - 2, 29, 30); *T. officinale* (23); *T. species* (35, 39, 45); *Thermopsis lanceolata* (7, 8 - 2, 12 - 5, 17 - 3, 20 - 5); *Thesium refractum* (2, 14, 28, 39, 45); *Trommsdorfia maculata* (2, 4 - 2, 29); *Tulipa uniflora* (18, 29); *Valeriana transjensisensis* (29); *Veronica porphyriana* (41); *Vicia amoena* (26); *Viola dissecta* (45); *V. montana* (45); *Xanthopaemelia camschadalis* (31 - 2, 37 - 3); *Youngia tenuifolia* (26 - 3, 33).

#### Локалитеты описаний:

| Номер в таблице | Номер в фитоценологе | Район           | Локалитет                     | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|----------------------|-----------------|-------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 1               | 12417                | Тандинский      | окр с.Сосновка                | 960                 | 50.9702        | 94.9918         | 14.06.2002 | Макунина Н.И. |
| 2               | 12440                | Улуг-Хемский    | окр с.Хольчук, 13км на восток | 1050                | 51.0718        | 93.4732         | 16.06.2002 | Макунина Н.И. |
| 3               | 12456                | Улуг-Хемский    | окр с.Арыг-Бажи               | 910                 | 51.4418        | 93.1372         | 18.06.2002 | Макунина Н.И. |
| 4               | 35579                | Каа-Хемский     | окр с.Ильинка, 12км на С-З    | 1213                | 51.1792        | 95.3358         | 24.06.2005 | Макунина Н.И. |
| 5               | 12514                | Дзун-Хемчикский | окр с.Шеми, 9км на Ю-Ю-З      | 1260                | 51.0857        | 91.2985         | 23.06.2002 | Макунина Н.И. |
| 6               | 12501                | Дзун-Хемчикский | окр с.Чадан, 25км на С-В-В    | 1240                | 51.2943        | 91.9375         | 22.06.2002 | Макунина Н.И. |
| 7               | 35590                | Пий-Хемский     | окр с.Хадын, 3км на восток    | 960                 | 51.9485        | 93.6785         | 27.06.2005 | Макунина Н.И. |
| 8               | 2518                 | Тандинский      | окр оз.Чагытай                | 1020                | 51.0363        | 94.9257         | 23.06.2003 | Макунина Н.И. |
| 9               | 12464                | Улуг-Хемский    | окр с.Чодура                  | 870                 | 51.3545        | 92.8683         | 19.06.2002 | Макунина Н.И. |
| 10              | 12522                | Дзун-Хемчикский | окр с.Шеми, 9км на Ю-Ю-З      | 1260                | 51.0847        | 91.298          | 23.06.2002 | Макунина Н.И. |
| 11              | 35551                | Каа-Хемский     | окр с.Бояровка, 23км на север | 1010                | 51.7303        | 95.4248         | 21.06.2005 | Макунина Н.И. |
| 12              | 35570                | Каа-Хемский     | окр с.Авыйган, 14км на С-З-З  | 1090                | 51.65533       | 95.3895         | 23.06.2005 | Макунина Н.И. |
| 13              | 35575                | Каа-Хемский     | окр с.Авыйган, 12км на С-З-З  | 950                 | 51.3435        | 95.4758         | 23.06.2005 | Макунина Н.И. |
| 14              | 35604                | Пий-Хемский     | окр с.Аржаан, 10км на С-З     | 1080                | 52.1397        | 93.5643         | 27.06.2005 | Макунина Н.И. |
| 15              | 35608                | Пий-Хемский     | окр с.Уюк, 7км на Ю-Ю-В       | 970                 | 52.0093        | 94.0692         | 28.06.2005 | Макунина Н.И. |
| 16              | 5137                 | Пий-Хемский     | окр с.Хадын                   | 1006                | 51.91183       | 93.69663        | 04.08.2007 | Макунина Н.И. |
| 17              | 8364                 | Чеди-Хольский   | окр с.Хову-Аксы               | 1139                | 51.20863       | 93.70636        | 16.07.2018 | Макунина Н.И. |
| 18              | 8882                 | Каа-Хемский     | окр с.Кунгустуг               | 842                 | 51.67261       | 95.30623        | 13.08.2021 | Макунина Н.И. |
| 19              | 8891                 | Тандинский      | окр с.Сосновка                | 986                 | 51.14539       | 94.5843         | 14.08.2021 | Макунина Н.И. |
| 20              | 8897                 | Тандинский      | окр с.Сосновка                | 1048                | 51.05506       | 94.66223        | 14.08.2021 | Макунина Н.И. |
| 21              | 12517                | Дзун-Хемчикский | окр с.Шеми, 9км на Ю-Ю-З      | 1200                | 51.086         | 91.3057         | 23.06.2002 | Макунина Н.И. |
| 22              | 12519                | Дзун-Хемчикский | окр с.Шеми, 9км на Ю-Ю-З      | 1260                | 51.085         | 91.2983         | 23.06.2002 | Макунина Н.И. |

| Номер в таблице | Номер в фитоцентоке | Район             | Локалитет                    | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|---------------------|-------------------|------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 23              | 8889                | Тандинский        | окр с.Сосновка               | 905                 | 51.19241       | 94.59613        | 14.08.2021 | Макунина Н.И. |
| 24              | 8356                | Дзун-Хемчикский   | окр с.Чадан                  | 1293                | 51.40346       | 91.84382        | 15.07.2018 | Макунина Н.И. |
| 25              | 12455               | Улуг-Хемский      | окр с.Арыг-Бажи              | 890                 | 51.4403        | 93.1405         | 18.06.2002 | Макунина Н.И. |
| 26              | 12459               | Улуг-Хемский      | окр с.Арыг-Бажи              | 930                 | 51.4463        | 93.1357         | 18.06.2002 | Макунина Н.И. |
| 27              | 12462               | Улуг-Хемский      | окр с.Арыг-Бажи              | 910                 | 51.4373        | 93.1417         | 18.06.2002 | Макунина Н.И. |
| 28              | 12483               | Дзун-Хемчикский   | окр с.Чадан, 20км на С-В-В   | 1260                | 51.3328        | 91.9032         | 21.06.2002 | Макунина Н.И. |
| 29              | 12419               | Тандинский        | окр с.Сосновка               | 1085                | 51.0863        | 94.611          | 14.06.2002 | Макунина Н.И. |
| 30              | 35592               | Пий-Хемский       | окр с.Хадын, 3км на восток   | 1023                | 51.9507        | 93.6825         | 27.06.2005 | Макунина Н.И. |
| 31              | 37417               | Овюрский          | окр с.Дус-Даг, 14км на С-3-3 | 1854                | 50.86779       | 92.41866        | 24.08.2008 | Макунина Н.И. |
| 32              | 7618                | Овюрский          | окр с.Торгалык               | 1804                | 50.86381       | 92.48139        | 05.08.2014 | Макунина Н.И. |
| 33              | 37409               | Овюрский          | окр с.Дус-Даг, 14км на С-3-3 | 1985                | 50.85791       | 92.46903        | 23.08.2008 | Макунина Н.И. |
| 34              | 8304                | Бай-Тайгинский    | окр оз.Кара-Холь             | 1502                | 51.34603       | 89.45152        | 10.07.2018 | Макунина Н.И. |
| 35              | 36687               | Бай-Тайгинский    | окр оз.Кара-Холь             | 1476                | 51.3583        | 89.4565         | 04.07.2006 | Макунина Н.И. |
| 36              | 7624                | Овюрский          | окр с.Торгалык               | 1812                | 50.85375       | 92.44157        | 06.08.2014 | Макунина Н.И. |
| 37              | 7629                | Овюрский          | окр с.Торгалык               | 1828                | 50.86668       | 92.42336        | 07.08.2014 | Макунина Н.И. |
| 38              | 7089                | Овюрский          | окр с.Дус-Даг                | 2050                | 50.90357       | 92.56596        | 08.08.2009 | Макунина Н.И. |
| 39              | 36686               | Бай-Тайгинский    | окр оз.Кара-Холь             | 1490                | 51.3573        | 89.4588         | 04.07.2006 | Макунина Н.И. |
| 40              | 8433                | Барун-Хемчикский  | Р.Улуг-Кангылыг (Ак-Суг)     | 1388                | 51.52336       | 90.12941        | 04.07.2019 | Макунина Н.И. |
| 41              | 8840                | Монгун-Тайгинский | окр с.Мугур-Аксы             | 2137                | 50.43063       | 90.09193        | 08.08.2021 | Макунина Н.И. |
| 42              | 37419               | Овюрский          | окр с.Дус-Даг, 14км на С-3-3 | 1853                | 50.86695       | 92.41802        | 25.08.2008 | Макунина Н.И. |
| 43              | 8449                | Барун-Хемчикский  | Р.Ак-Суг                     | 1378                | 51.58351       | 90.08975        | 06.07.2019 | Макунина Н.И. |
| 44              | 7054                | Овюрский          | окр с.Дус-Даг                | 1948                | 50.98048       | 92.71414        | 05.08.2009 | Макунина Н.И. |
| 45              | 36717               | Бай-Тайгинский    | окр оз.Кара-Холь             | 1415                | 51.2767        | 89.5565         | 08.07.2006 | Макунина Н.И. |

Таблица 3

Ассоциация *Colurio geoidis*–*Caricetum pediformis*

Table 3

Association *Colurio geoidis*–*Caricetum pediformis*

| Номер в таблице      | 1     | 2     | 3    | 4     | 5    | 6    | 7     | 8     | 9    | 10    | 11   | 12   | 13   | 14   | 15   | 16   | 17    | 18    | 19   | 20   | 21   | 22   | 23    | 24   | 25    | 26   | 27   | 28    | 29    | 30    | 31    | 32    | 33    | 34    | 35    | 36    | 37    | 38   | 39    | 40    |    |  |
|----------------------|-------|-------|------|-------|------|------|-------|-------|------|-------|------|------|------|------|------|------|-------|-------|------|------|------|------|-------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|----|--|
| Номер в фитоценологе | 37504 | 35615 | 8883 | 37525 | 8636 | 8628 | 36574 | 12532 | 8352 | 12507 | 8621 | 8622 | 8626 | 8640 | 8704 | 8941 | 12487 | 12488 | 8349 | 5171 | 8641 | 8940 | 35558 | 8301 | 12503 | 8316 | 8435 | 12531 | 35554 | 12489 | 12541 | 35591 | 12540 | 12539 | 12542 | 12450 | 36714 | 2538 | 36578 | 12467 |    |  |
| Высота над ур.м.     | 1174  | 951   | 830  | 1110  | 683  | 965  | 800   | 1190  | 1446 | 1220  | 1201 | 1182 | 1254 | 763  | 782  | 1076 | 1260  | 1260  | 1263 | 763  | 738  | 1020 | 795   | 1540 | 1230  | 1551 | 1287 | 1190  | 1000  | 1270  | 1445  | 997   | 1465  | 1704  | 1440  | 1110  | 1486  | 1445 | 935   | 910   |    |  |
| Экспозиция           | 230   | 300   | 70   | 110   | 330  | 340  | 10    | 90    | 160  | 45    | 230  | 200  | 180  | 300  | 110  | 340  | 270   | 225   |      | 10   | 280  | 10   | 80    | 260  | 180   | 300  | 50   | 180   | 147   | 225   | 135   | 180   | 135   | 135   | 135   | 180   |       | 270  | 50    | 180   |    |  |
| Крутизна             | 10    | 7     | 12   | 25    | 15   | 5    | 25    | 3     | 10   | 3     | 7    | 1    | 3    | 12   | 3    | 3    | 3     | 5     |      | 3    | 10   | 15   | 12    | 7    | 3     | 7    | 10   | 15    | 18    | 10    | 12    | 8     | 12    | 15    | 10    | 20    |       | 25   | 30    | 25    |    |  |
| III кустарников      |       |       |      | 20    | 10   |      | 20    | 15    |      | 20    | 30   |      |      |      |      | 20   |       | 15    |      | 30   |      |      |       | 20   |       |      |      | 30    |       | 7     |       |       |       |       |       |       |       |      | 30    |       |    |  |
| III травостоя        | 70    | 75    | 70   | 60    | 80   | 50   | 70    | 55    | 60   | 75    | 70   | 70   | 70   | 80   | 60   | 60   | 75    | 65    | 60   | 60   | 90   | 80   | 70    | 60   | 70    | 70   | 70   | 50    | 75    | 65    | 70    | 60    | 70    | 70    | 70    | 40    | 65    | 75   | 60    | 65    | 1  |  |
| Число видов          | 32    | 30    | 25   | 32    | 29   | 26   | 27    | 23    | 30   | 21    | 29   | 31   | 33   | 21   | 26   | 26   | 25    | 25    | 18   | 18   | 18   | 26   | 23    | 21   | 20    | 23   | 33   | 28    | 29    | 29    | 23    | 38    | 26    | 29    | 22    | 31    | 25    | 33   | 16    | 25    | 40 |  |

Д.в. асс. *Colurio geoidis*–*Caricetum pediformis*

|                             |   |   |    |    |    |    |   |   |    |    |   |    |    |    |    |    |    |    |   |   |    |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |     |   |
|-----------------------------|---|---|----|----|----|----|---|---|----|----|---|----|----|----|----|----|----|----|---|---|----|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|-----|---|
| <i>Stipa capillata</i>      | 8 | 8 | 30 | 10 | 20 | 30 | 3 | 2 | 30 | 20 | 5 | 10 | 20 | 30 | 20 | 20 | 30 | 30 | 3 | . | 50 | 2 | 7 | 2 | + | + | 3 | 2 | 20 | 3 | . | 3 | . | + | . | . | . | + | 5 | V   |   |
| <i>Galium verum</i>         | + | 2 | +  | 2  | 3  | 2  | + | 2 | 2  | +  | 3 | 3  | +  | +  | +  | 3  | +  | +  | 5 | 3 | 2  | 3 | + | + | + | 3 | + | + | +  | + | + | 2 | + | + | + | + | + | 2 | + | +   | V |
| <i>Astragalus adsurgens</i> | + | . | .  | .  | .  | .  | + | + | .  | 3  | + | +  | .  | .  | +  | 2  | +  | +  | . | . | +  | . | + | + | + | 3 | + | . | .  | . | + | + | . | . | + | 2 | + | . | . | III |   |

Д.в. пор. *Helictotrichetalia schelliani*

|                                   |    |    |    |    |    |    |    |   |   |    |    |    |    |   |    |   |    |    |    |    |    |    |   |   |   |    |    |   |    |    |   |   |    |    |    |   |   |   |    |   |     |   |   |
|-----------------------------------|----|----|----|----|----|----|----|---|---|----|----|----|----|---|----|---|----|----|----|----|----|----|---|---|---|----|----|---|----|----|---|---|----|----|----|---|---|---|----|---|-----|---|---|
| <i>Carex pediformis</i>           | 20 | 3  | 5  | 20 | 10 | +  | 7  | + | + | 5  | 12 | 7  | 10 | 5 | 5  | . | 10 | 17 | 5  | 20 | +  | 40 | + | + | 5 | 3  | 2  | 2 | 10 | 30 | 7 | 5 | 12 | 15 | 3  | + | + | 5 | 20 | + | V   |   |   |
| <i>Dianthus versicolor</i>        | +  | +  | +  | +  | +  | +  | .  | + | + | .  | 2  | +  | +  | + | +  | . | +  | .  | +  | .  | +  | +  | + | 2 | . | +  | +  | + | .  | +  | + | + | +  | +  | +  | + | + | 2 | +  | + | +   | + | V |
| <i>Aster alpinus</i>              | 2  | 3  | .  | .  | .  | 2  | +  | . | 5 | +  | +  | 15 | 3  | . | .  | . | 2  | +  | +  | .  | .  | +  | . | 3 | + | 2  | 15 | . | +  | +  | 2 | 5 | 2  | +  | .  | 2 | 5 | 2 | .  | . | IV  |   |   |
| <i>Pulsatilla turczaninovi</i>    | 8  | 2  | .  | +  | +  | +  | .  | + | . | .  | .  | +  | 2  | 2 | 2  | 2 | +  | .  | +  | +  | 3  | 2  | + | . | . | .  | .  | + | 3  | 3  | + | 3 | +  | +  | +  | 2 | 5 | . | 2  | . | IV  |   |   |
| <i>Veronica incana</i>            | 2  | 5  | 3  | +  | 2  | 3  | 5  | 3 | 2 | .  | +  | 2  | 3  | 2 | +  | 7 | .  | .  | 3  | 2  | 5  | +  | + | 2 | 7 | 2  | +  | 2 | 2  | .  | 2 | 5 | 2  | 2  | +  | + | . | 2 | .  | 5 | V   |   |   |
| <i>Helictotrichon altaicum</i>    | +  | 12 | 30 | .  | 15 | 10 | 20 | 3 | 8 | 40 | .  | .  | 10 | 5 | 10 | . | 15 | 12 | 40 | .  | 20 | 20 | . | . | . | .  | 3  | + | 20 | 5  | + | 3 | .  | .  | .  | + | . | 5 | 10 | 7 | IV  |   |   |
| <i>Schizonepeta multifida</i>     | 5  | .  | +  | .  | .  | +  | +  | . | 2 | 3  | .  | +  | 2  | . | .  | + | 2  | +  | .  | +  | .  | .  | + | . | 5 | .  | .  | 3 | +  | +  | + | + | +  | +  | +  | 2 | . | + | .  | . | III |   |   |
| <i>Heteropappus altaicus</i>      | +  | .  | +  | .  | +  | +  | .  | 2 | . | .  | +  | 2  | +  | + | +  | 5 | .  | .  | .  | 2  | +  | .  | + | . | 2 | .  | .  | + | +  | .  | + | + | +  | +  | +  | . | . | . | .  | + | III |   |   |
| <i>Helictotrichon schellianum</i> | .  | +  | .  | .  | .  | .  | 5  | . | + | .  | .  | .  | .  | . | 3  | . | .  | .  | .  | .  | .  | +  | . | . | . | 10 | .  | + | .  | .  | + | + | +  | +  | .  | . | . | 3 | .  | . | II  |   |   |
| <i>Thalictrum foetidum</i>        | .  | .  | .  | .  | +  | .  | +  | . | . | +  | .  | .  | .  | . | +  | . | +  | .  | .  | .  | .  | 2  | . | . | . | .  | .  | . | .  | .  | . | . | .  | .  | .  | . | . | . | .  | + | .   | I |   |
| <i>Coluria geoides</i>            | 5  | 7  | 10 | 10 | 5  | 3  | +  | 3 | 3 | 3  | .  | .  | .  | . | .  | . | .  | .  | +  | .  | .  | .  | . | . | . | .  | .  | 2 | 2  | .  | 5 | 3 | +  | 5  | 12 | 5 | . | . | 2  | + | III |   |   |

| Номер в таблице                              | 1  | 2  | 3 | 4 | 5  | 6  | 7  | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |    |    |     |
|--|----|----|---|---|----|----|----|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| Д.в. класса <i>Cleistogenetea squarrosae</i> |    |    |   |   |    |    |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
| <i>Caragana pugnata</i>                      | .  | 3  | 2 | 3 | 5  | 20 | 10 | 3 | 2 | .  | +  | +  | +  | 15 | 7  | 20 | 7  | 15 | 10 | 10 | 15 | 10 | +  | 20 | .  | 5  | 10 | 5  | 10 | 7  | 2  | 5  | 5  | 3  | 2  | +  | 5  | 2  | .  | 3  | V  |    |     |
| <i>Potentilla acaulis</i>                    | 2  | +  | 2 | + | +  | +  | .  | 9 | 2 | .  | 5  | 7  | 2  | +  | +  | 3  | +  | +  | .  | .  | .  | .  | 15 | 5  | .  | +  | 2  | 12 | +  | 7  | 2  | 7  | 5  | 10 | +  | 3  | +  | 5  | .  | 2  | IV |    |     |
| <i>Potentilla bifurca</i>                    | +  | 2  | . | . | +  | +  | .  | . | . | .  | .  | +  | +  | .  | +  | +  | +  | +  | +  | .  | .  | +  | 2  | +  | +  | 2  | +  | +  | +  | +  | +  | 2  | +  | +  | +  | .  | +  | 2  | 2  | 2  | IV |    |     |
| <i>Festuca valesiaca</i>                     | 2  | 3  | . | . | .  | .  | 8  | 9 | 3 | 2  | .  | 7  | 3  | .  | 2  | 5  | .  | .  | .  | 3  | .  | .  | 15 | 15 | 12 | +  | 10 | 7  | .  | .  | 5  | 3  | 10 | +  | 7  | 3  | 15 | 25 | .  | +  | IV |    |     |
| <i>Poa botryoides</i>                        | 15 | 12 | 3 | 7 | 3  | .  | .  | 5 | 3 | 5  | 3  | 3  | 3  | +  | +  | 10 | 2  | .  | .  | 2  | +  | 5  | 7  | 12 | 25 | +  | 10 | 2  | 5  | 3  | 5  | 9  | 7  | 3  | 5  | 3  | 10 | 5  | 2  | 3  | V  |    |     |
| <i>Artemisia frigida</i>                     | 5  | 3  | 3 | + | +  | 6  | 3  | 2 | + | 6  | 7  | 10 | 7  | 20 | 7  | 3  | 2  | 2  | 3  | .  | 2  | 3  | .  | 20 | .  | 6  | 5  | 7  | 2  | 5  | 10 | 5  | 12 | 12 | 10 | 5  | 5  | +  | 2  | 10 | V  |    |     |
| <i>Koeleria cristata</i>                     | 3  | .  | + | + | 2  | +  | 3  | . | 3 | .  | 3  | +  | .  | +  | 3  | 3  | .  | .  | .  | .  | +  | +  | 12 | 2  | 2  | .  | 10 | 5  | 2  | 3  | 7  | 5  | 7  | 3  | 10 | 2  | 10 | 7  | .  | 5  | IV |    |     |
| <i>Carex duriuscula</i>                      | +  | .  | . | . | .  | .  | .  | 2 | . | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | 2  | 3  | .  | .  | 3  | +  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | +  | .  | .  | II  |
| Прочие виды                                  |    |    |   |   |    |    |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
| <i>Phlomis tuberosa</i>                      | +  | +  | . | 2 | +  | +  | 2  | + | + | 2  | 3  | +  | +  | .  | .  | .  | 2  | +  | 2  | 5  | .  | 3  | .  | .  | .  | 3  | .  | +  | .  | .  | +  | +  | +  | +  | +  | +  | .  | .  | 2  | +  | .  | IV |     |
| <i>Scabiosa ochroleuca</i>                   | +  | .  | + | . | .  | +  | +  | . | + | .  | .  | +  | 3  | .  | .  | .  | +  | +  | .  | .  | .  | .  | +  | .  | +  | .  | .  | +  | .  | +  | +  | .  | +  | +  | +  | +  | +  | +  | .  | .  | .  | .  | III |
| <i>Artemisia glauca</i>                      | 2  | 3  | . | 2 | .  | .  | .  | + | . | +  | 10 | 7  | 7  | .  | +  | 5  | .  | +  | .  | 12 | +  | 7  | .  | .  | 6  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | III |
| <i>Oxytropis strobilacea</i>                 | +  | .  | . | . | .  | .  | +  | . | . | .  | +  | .  | .  | .  | +  | .  | +  | .  | +  | .  | .  | +  | .  | .  | .  | +  | 2  | .  | +  | +  | +  | 2  | +  | .  | .  | +  | +  | +  | .  | .  | .  | .  | III |
| <i>Spiraea hypericifolia</i>                 | .  | 5  | + | 3 | 5  | +  | .  | + | . | +  | .  | .  | .  | 10 | 15 | .  | .  | .  | .  | 20 | +  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | 5  | .  | .  | .  | 5  | .  | .  | .  | 30 | 2  | II |     |
| <i>Bupleurum scorzonerifolium</i>            | .  | .  | 3 | . | +  | +  | .  | . | . | .  | 5  | +  | 5  | .  | +  | +  | +  | +  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | II |     |
| <i>Galatella angustissima</i>                | +  | 2  | 3 | 2 | +  | +  | +  | . | . | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | +  | II  |
| <i>Kitagawia baicalensis</i>                 | +  | .  | . | 2 | +  | .  | +  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | 2  | +  | .  | +  | .  | +  | +  | +  | .  | .  | .  | 2  | II  |
| <i>Artemisia commutata</i>                   | +  | 2  | . | . | .  | .  | .  | 2 | + | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | +  | .  | +  | .  | .  | .  | .  | .  | .  | +  | 2  | +  | .  | II  |
| <i>Carex supina</i>                          | .  | .  | . | . | .  | .  | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | 40 | .  | .  | 3  | .  | 5  | +  | +  | 10 | 15 | 5  | 5  | .  | 5  | II  |
| <i>Gentiana decumbens</i>                    | .  | +  | . | . | .  | +  | .  | . | + | +  | .  | 2  | 3  | .  | .  | .  | +  | +  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | II  |
| <i>Achnatherum sibiricum</i>                 | .  | .  | 2 | 6 | 14 | .  | .  | . | . | .  | 14 | .  | .  | 2  | .  | 4  | .  | .  | .  | .  | 2  | 6  | .  | .  | .  | .  | .  | .  | .  | 10 | .  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | II |     |
| <i>Orostachys spinosa</i>                    | .  | .  | . | . | .  | .  | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | +  | +  | 2  | +  | +  | +  | .  | .  | +  | II |     |
| <i>Androsace septentrionalis</i>             | .  | .  | . | . | +  | .  | +  | . | + | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | 2  | .  | .  | +  | .  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | +  | II |     |

**Примечание.** С I классом постоянства отмечены: *Abietinella abietina* (27 - 2); *Aconogonon alpinum* (4); *Adenophora coronopifolia* (12 - 2, 13 - 2, 18 - 2, 38 - 2); *A. lamarckii* (38); *Agropyron cristatum* (14 - 3, 27 - 2, 31 - 4, 33 - 4); *Agrostis tuvinica* (27 - 5); *Allium anisopodium* (7 - 2, 32 - 2); *A. austrosibiricum* (11 - 5, 17, 18, 21); *A. clathratum* (15 - 2, 19 - 2); *A. prostratum* (8 - 2, 17 - 2); *A. ramosum* (11 - 3); *A. rubens* (3, 30 - 2); *A. schischkinii* (5, 11, 13, 14, 16, 21, 22); *A. stellerianum* (9 - 2); *A. strictum* (1 - 2, 2 - 2); *A. vodopjanovae* (3, 36 - 2); *Alyssum obovatum* (5, 28 - 2, 29, 34); *Androsace maxima* (4); *Artemisia obtusiloba* (16 - 2, 23 - 2); *A. santolinifolia* (4 - 3, 10, 25 - 2, 26, 34); *A. scoparia* (16); *A. tanacetifolia* (38); *Astragalus depauperatus* (27); *A. multicaulis* (24, 27 - 3); *Bromopsis inermis* (4, 9, 18, 25); *Bupleurum multinerve* (24, 27, 37, 38); *Calamagrostis epigeios* (9); *Campanula sibirica* (19); *Caragana bungei* (4, 7 - 3, 85, 11 - 30, 28 - 20); *Caragana spinosa* (10 - 20); *Cerastium arvense* (36, 38); *Clausia aprica* (26); *Cleistogenes squarrosa* (11, 12, 15 - 2, 16, 23 - 3); *Cotoneaster melanocarpus* (4 - 3, 36); *Draba nemorosa* (34); *Dracocephalum fruticulosum* (22); *Dracocephalum nutans* (14); *Elytrigia geniculata* (1, 27, 32, 33); *E. repens* (17); *Ephedra monosperma* (2, 5, 7, 14 - 2, 23, 30); *Erigeron acris* (25); *Erysimum flavum* (7); *Euphorbia tshuiensis* (8, 12, 13, 18); *Fragaria viridis* (9); *Galatella macrosciadia* (32); *Gentiana squarrosa* (38); *Gentianella amarella* (26, 38); *Glycyrrhiza uralensis* (15); *Goniolimon speciosum* (1, 3, 4, 16, 27, 32); *Gypsophila altissima* (17); *Heteropappus biennis* (12, 13); *Iris bloudowii* (11, 12, 13, 15 - 2, 27, 37); *I. potaninii*

(18, 19, 23, 38); *I. ruthenica* (27, 33); *Kochia prostrata* (14 - 3, 23, 37); *Krascheninnikovia ceratoides* (20 - 5); *Larix sibirica* (26 - 2); *Leontopodium ochroleucum* (13 - 2, 17, 18, 28, 30); *Leymus dasystachys* (10, 27, 32, 37); *Linaria acutiloba* (6); *Lychnis sibirica* (1, 2, 36); *Medicago falcata* (23); *Noccaea cochleariformis* (2); *Nonea rossica* (13); *Onobrychis arenaria* (13); *Oxytropis pilosa* (3); *Panzerina lanata* (11); *Pentaphylloides fruticosa* (40); *Peucedanum vaginatum* (3, 9, 10, 11, 12, 13, 26); *Phelipanche uralensis* (5, 12); *Phleum phleoides* (1, 4 - 3, 6, 9, 15, 25 - 3, 35, 390); *Polygala comosa* (2); *P. sibirica* (9, 30, 32, 36); *Potentilla longifolia* (6, 9, 16, 22, 25); *P. sericea* (25 - 2, 27, 34, 36, 37, 38 - 2); *P. tanacetifolia* (39); *Pulsatilla patens* (1, 40); *Rhytidium rugosum* (24, 27 - 20, 37 - 5); *Saussurea pricei* (2, 32); *Saussurea salicifolia* (3, 7 - 2); *Scutellaria scordiifolia* (13); *Selaginella sanguinolenta* (5 - 30, 7 - 8, 14 - 3); *Silene repens* (11, 21); *Spiraea chamaedrifolia* (4 - 2, 7 - 7, 10, 20); *Stellaria dichotoma* (5, 11, 12, 30); *Stevenia cheiranthoides* (12, 30, 32, 36, 38 - 2); *Stipa pennata* (4, 32, 39 - 2, 400); *Taraxacum species* (11, 29, 32, 38); *Teloxys aristata* (4); *Tephrosia integrifolia* (2, 6); *Thalictrum minus* (4, 25); *Th. petaloideum* (38 - 2); *Thesium refractum* (2, 13, 18, 26, 27, 30); *Th. repens* (16, 22); *Thymus serpyllum* (4, 28 - 2, 29 - 3, 32 - 7, 40 - 2); *Trommsdorfia maculata* (29); *Vicia costata* (30); *Xanthopaemelia camtschadalis* (37).

#### Локалитеты описаний:

| Номер в таблице | Номер в фитоценологе | Район           | Локалитет                    | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|----------------------|-----------------|------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 1               | 37504                | Пий-Хемский     | окр с.Сесерлиг               | 1174                | 51.90613       | 94.22575        | 01.09.2008 | Макунина Н.И. |
| 2               | 35615                | Пий-Хемский     | окр с.Суш, 17км на Ю-В       | 951                 | 51.9548        | 94.3328         | 28.06.2005 | Макунина Н.И. |
| 3               | 8883                 | Каа-Хемский     | окр с.Кунгустуг              | 830                 | 51.65995       | 95.29027        | 13.08.2021 | Макунина Н.И. |
| 4               | 37525                | Пий-Хемский     | окр с.Сесерлиг               | 1110                | 51.89414       | 94.2344         | 03.09.2008 | Макунина Н.И. |
| 5               | 8636                 | Улуг-Хемский    | окр с.Хайыракан              | 683                 | 51.55683       | 93.03757        | 15.08.2020 | Макунина Н.И. |
| 6               | 8628                 | Улуг-Хемский    | окр с.Ак-Дуруг               | 965                 | 51.40113       | 92.3778         | 14.08.2020 | Макунина Н.И. |
| 7               | 36574                | Улуг-Хемский    | окр с.Иий-Тал                | 800                 | 51.5005        | 93.3762         | 23.06.2006 | Макунина Н.И. |
| 8               | 12532                | Дзун-Хемчикский | окр с.Шеми, 9км на Ю-Ю-З     | 1190                | 51.0885        | 91.3075         | 23.06.2002 | Макунина Н.И. |
| 9               | 8352                 | Дзун-Хемчикский | окр с.Чадан                  | 1446                | 51.4208        | 91.90859        | 14.07.2018 | Макунина Н.И. |
| 10              | 12507                | Дзун-Хемчикский | окр с.Хондергей, 7км на Юг   | 1220                | 51.0577        | 91.6115         | 22.06.2002 | Макунина Н.И. |
| 11              | 8621                 | Дзун-Хемчикский | окр г.Чадан                  | 1201                | 51.34056       | 91.87488        | 14.08.2020 | Макунина Н.И. |
| 12              | 8622                 | Дзун-Хемчикский | окр г.Чадан                  | 1182                | 51.33263       | 91.8823         | 14.08.2020 | Макунина Н.И. |
| 13              | 8626                 | Дзун-Хемчикский | окр г.Чадан                  | 1254                | 51.31854       | 91.92325        | 14.08.2020 | Макунина Н.И. |
| 14              | 8640                 | Улуг-Хемский    | окр с.Арыг-Бажи              | 763                 | 51.51945       | 93.05199        | 15.08.2020 | Макунина Н.И. |
| 15              | 8704                 | Каа-Хемский     | окр с.Сарыг-Сеп              | 782                 | 51.53125       | 95.51659        | 21.08.2020 | Макунина Н.И. |
| 16              | 8941                 | Чаа-Хольский    | окр с.Шанчи                  | 1076                | 51.59616       | 92.10862        | 19.08.2021 | Макунина Н.И. |
| 17              | 12487                | Дзун-Хемчикский | окр с.Чадан, 20км на С-В-В   | 1260                | 51.3313        | 91.9025         | 21.06.2002 | Макунина Н.И. |
| 18              | 12488                | Дзун-Хемчикский | окр с.Чадан, 20км на С-В-В   | 1260                | 51.329         | 91.9053         | 21.06.2002 | Макунина Н.И. |
| 19              | 8349                 | Дзун-Хемчикский | окр с.Чадан                  | 1263                | 51.40241       | 91.8133         | 14.07.2018 | Макунина Н.И. |
| 20              | 5171                 | Пий-Хемский     | окр с.Суш                    | 763                 | 52.006         | 94.40545        | 09.08.2007 | Макунина Н.И. |
| 21              | 8641                 | Улуг-Хемский    | окр с.Арыг-Бажи              | 738                 | 51.51976       | 93.04855        | 15.08.2020 | Макунина Н.И. |
| 22              | 8940                 | Чаа-Хольский    | окр с.Шанчи                  | 1020                | 51.59387       | 92.02667        | 19.08.2021 | Макунина Н.И. |
| 23              | 35558                | Каа-Хемский     | окр с.Бояровка, 5км на север | 795                 | 51.6055        | 95.3432         | 21.06.2005 | Макунина Н.И. |

| Номер в таблице | Номер в фитоцентеке | Район            | Локалитет                     | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|---------------------|------------------|-------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 24              | 8301                | Бай-Тайгинский   | окр оз.Кара-Холь              | 1540                | 51.34211       | 89.45193        | 09.07.2018 | Макунина Н.И. |
| 25              | 12503               | Дзун-Хемчикский  | окр с.Хондергей, 8км на Ю-З   | 1230                | 51.067         | 91.5885         | 22.06.2002 | Макунина Н.И. |
| 26              | 8316                | Бай-Тайгинский   | окр оз.Кара-Холь              | 1551                | 51.3446        | 89.4508         | 10.07.2018 | Макунина Н.И. |
| 27              | 8435                | Барун-Хемчикский | Р.Устю-Ак-Ой (Ак-Суг)         | 1287                | 51.47894       | 90.22117        | 05.07.2019 | Макунина Н.И. |
| 28              | 12531               | Дзун-Хемчикский  | окр с.Шеми, 9км на Ю-Ю-З      | 1190                | 51.0883        | 91.3078         | 23.06.2002 | Макунина Н.И. |
| 29              | 35554               | Каа-Хемский      | окр с.Бояровка, 18км на север | 1000                | 51.7043        | 95.3827         | 21.06.2005 | Макунина Н.И. |
| 30              | 12489               | Дзун-Хемчикский  | окр с.Чадан, 20км на С-В-В    | 1270                | 51.3288        | 91.9078         | 21.06.2002 | Макунина Н.И. |
| 31              | 12541               | Барун-Хемчикский | окр с.Эрги-Барлык             | 1445                | 50.8615        | 90.4685         | 24.06.2002 | Макунина Н.И. |
| 32              | 35591               | Пий-Хемский      | окр с.Хадын, 3км на восток    | 997                 | 51.9502        | 93.6803         | 27.06.2005 | Макунина Н.И. |
| 33              | 12540               | Барун-Хемчикский | окр с.Эрги-Барлык             | 1465                | 50.8598        | 90.4673         | 24.06.2002 | Макунина Н.И. |
| 34              | 12539               | Барун-Хемчикский | окр с.Эрги-Барлык             | 1704                | 50.8612        | 90.4675         | 24.06.2002 | Макунина Н.И. |
| 35              | 12542               | Барун-Хемчикский | окр с.Эрги-Барлык             | 1440                | 50.866         | 90.4783         | 24.06.2002 | Макунина Н.И. |
| 36              | 12450               | Улуг-Хемский     | окр с.Хольчук, 13км на восток | 1110                | 51.0733        | 93.4632         | 17.06.2002 | Макунина Н.И. |
| 37              | 36714               | Бай-Тайгинский   | окр оз.Кара-Холь              | 1486                | 51.3585        | 89.4647         | 08.07.2006 | Макунина Н.И. |
| 38              | 2538                | Барун-Хемчикский | Р.Кара-Суг                    | 1445                | 51.5928        | 90.0758         | 26.06.2003 | Макунина Н.И. |
| 39              | 36578               | Улуг-Хемский     | окр с.Иий-Тал, 6км на Ю-В     | 935                 | 51.5178        | 93.368          | 23.06.2006 | Макунина Н.И. |
| 40              | 12467               | Улуг-Хемский     | окр с.Чодура                  | 910                 | 51.354         | 92.8808         | 19.06.2002 | Макунина Н.И. |

Таблица 4

Ассоциации *Oxytropido eriocarphae-Poetum attenuatae* (1-30) и *Astragalo brevifoliae-Stipetum glareosae* (31-45)

Table 4

Associations *Oxytropido eriocarphae-Poetum attenuatae* (1-30) and *Astragalo brevifoliae-Stipetum glareosae* (31-45)

| Номер в таблице   | 1   | 2     | 3    | 4     | 5     | 6     | 7    | 8    | 9     | 10    | 11    | 12   | 13    | 14   | 15   | 16    | 17    | 18   | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26    | 27    | 28    | 29   | 30   | 31  | 32   | 33   | 34   | 35   | 36   | 37   | 38   | 39   | 40   | 41   | 42   | 43   | 44   | 45   | a  | b   |     |    |    |   |
|---|---|-------|------|-------|-------|-------|------|------|-------|-------|-------|------|-------|------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|-----|-----|----|----|---|
| Ассоциации  | <i>Oxytropido eriocarphae-Poetum attenuatae</i> (a) |       |      |       |       |       |      |      |       |       |       |      |       |      |      |       |       |      |       |       |       |       |       |       |      |       |       |       |      |      | <i>Astragalo brevifoliae-Stipetum glareosae</i> (b) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |     |     |    |    |   |
| Номер в фитоценологе  | 36599   | 36627 | 7641 | 36601 | 36637 | 36638 | 7622 | 7640 | 36604 | 36606 | 36616 | 7634 | 35639 | 7083 | 7645 | 36613 | 36614 | 7646 | 35640 | 36649 | 36652 | 36655 | 36653 | 36636 | 8844 | 36619 | 36629 | 35646 | 7088 | 7668 | 8837  | 8838 | 8839 | 8836 | 8828 | 8829 | 8830 | 8831 | 8832 | 8833 | 8834 | 8835 | 8848 | 8851 | 8852 |    |     |     |    |    |   |
| Высота над ур.м.  | 2358  | 2205  | 2008 | 2288  | 2170  | 2185  | 1810 | 2031 | 2377  | 2377  | 2280  | 1835 | 2460  | 2143 | 2120 | 2285  | 2295  | 2184 | 2470  | 2179  | 2195  | 2132  | 2130  | 2325  | 8844 | 2390  | 2195  | 2320  | 2108 | 1820 | 1909  | 1958 | 2029 | 1906 | 1802 | 1880 | 2073 | 1883 | 1877 | 1855 | 1894 | 1866 | 1955 | 1938 | 1807 |    |     |     |    |    |   |
| Экспозиция  | 130   | 80    | 180  | 150   | 340   | 230   | 120  | 130  |       | 10    | 270   |      | 110   | 230  | 240  | 120   | 280   | 250  | 40    | 70    | 90    | 110   | 70    | 310   | 170  | 350   | 320   | 80    | 80   | 150  | 190   | 160  | 180  | 340  | 330  | 100  | 30   | 20   | 340  | 320  | 160  |      |      |      |      |    |     |     |    |    |   |
| Крутизна  | 5   | 5     | 17   | 17    | 15    | 30    | 15   | 5    |       | 3     | 25    |      | 25    | 30   | 17   | 10    | 10    | 15   | 7     | 20    | 15    | 15    | 5     | 15    | 15   | 5     | 20    | 5     | 25   | 5    | 5   | 5    | 5    | 3    | 3    | 3    | 5    | 3    | 15   | 12   | 7    |      | 3    |      |      |    |     |     |    |    |   |
| Проективное покрытие  | 70  | 40    | 40   | 50    | 50    | 40    | 50   | 60   | 60    | 40    | 50    | 40   | 50    | 40   | 50   | 60    | 70    | 50   | 35    | 50    | 30    | 60    | 45    | 80    | 40   | 40    | 45    | 50    | 60   | 60   | 40  | 30   | 30   | 30   | 30   | 20   | 30   | 40   | 30   | 30   | 30   | 30   | 40   | 30   | 40   | 30 |     |     |    |    |   |
| Число видов   | 27  | 27    | 26   | 24    | 24    | 21    | 41   | 31   | 26    | 24    | 20    | 22   | 22    | 28   | 26   | 24    | 23    | 26   | 18    | 31    | 27    | 28    | 32    | 24    | 26   | 18    | 25    | 24    | 30   | 29   | 30  | 31   | 29   | 22   | 16   | 16   | 16   | 18   | 16   | 17   | 14   | 22   | 14   | 19   | 13   | 30 | 15  |     |    |    |   |
| <i>Д.в. асс. Oxytropido eriocarphae-Poetum attenuatae</i>   |   |       |      |       |       |       |      |      |       |       |       |      |       |      |      |       |       |      |       |       |       |       |       |       |      |       |       |       |      |      |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |     |     |    |    |   |
| <i>Oxytropis eriocarpha</i>                                 | +   | +     | +    | +     | 2     | +     | +    | +    | 2     | +     | +     | +    | +     | +    | +    | +     | +     | +    | 2     | .     | .     | .     | .     | .     | .    | .     | .     | .     | .    | .    | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .  | .   | .   | .  | IV | . |
| <i>Dianthus versicolor</i>                                  | +   | +     | +    | +     | +     | .     | 2    | +    | +     | .     | .     | +    | .     | +    | +    | +     | +     | +    | .     | .     | +     | +     | 2     | 2     | +    | .     | +     | +     | 2    | .    | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .  | .   | .   | IV | .  |   |
| <i>Allium tuvanicum</i>                                     | 2   | +     | 2    | .     | +     | +     | 2    | .    | 2     | 2     | 2     | 2    | 4     | .    | .    | .     | .     | .    | .     | +     | +     | +     | +     | .     | .    | 2     | 2     | 2     | .    | 2    | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .  | .   | IV  | .  |    |   |
| <i>Oxytropis macrosema</i>                                  | 2   | 3     | .    | +     | 3     | +     | .    | .    | 8     | 5     | 7     | .    | .     | 2    | .    | 7     | 7     | .    | .     | 2     | .     | 2     | +     | 10    | +    | 5     | 3     | .     | 2    | .    | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .  | .   | IV  | .  |    |   |
| <i>Chamaerhodos altaica</i>                                 | +   | 3     | 3    | 7     | .     | 5     | .    | .    | 8     | .     | .     | 3    | 7     | 2    | .    | 7     | .     | .    | 3     | 2     | 2     | 2     | 2     | .     | 3    | .     | .     | 2     | .    | .    | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .  | .   | III | .  |    |   |
| <i>Amblynotus rupestris</i>                                 | +   | .     | +    | 2     | +     | .     | .    | +    | .     | .     | +     | +    | 3     | 2    | +    | .     | +     | 2    | 2     | .     | .     | .     | +     | .     | .    | +     | 2     | +     | .    | +    | .   | +    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .  | III | I   |    |    |   |
| <i>Alyssum obovatum</i>                                     | 2   | +     | .    | 6     | .     | .     | +    | 2    | +     | +     | .     | +    | .     | .    | 2    | 2     | 4     | 2    | .     | 2     | +     | 5     | +     | 2     | 3    | .     | 3     | .     | .    | .    | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .  | IV  | .   |    |    |   |
| <i>Д.в. союза Oxytropido macrosemae-Caricion pediformis</i> |   |       |      |       |       |       |      |      |       |       |       |      |       |      |      |       |       |      |       |       |       |       |       |       |      |       |       |       |      |      |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |     |     |    |    |   |
| <i>Koeleria altaica+K. cristata</i>                         | 7   | +     | 7    | 12    | 10    | 7     | 5    | 3    | 10    | 2     | 3     | 2    | +     | +    | 8    | 12    | 12    | 9    | .     | 3     | 10    | 7     | 3     | 5     | 3    | +     | 10    | 3     | 15   | 15   | 15  | 7    | 5    | 5    | +    | .    | 3    | 2    | 2    | 7    | 5    | 7    | 3    | 3    | .    | V  | V   |     |    |    |   |
| <i>Festuca tschujensis+F. valesiaca</i>                     | 5   | 2     | 7    | 2     | 12    | 7     | 2    | 3    | 5     | 2     | 5     | 7    | 5     | 15   | 7    | 7     | 15    | 25   | 12    | 2     | 5     | 7     | 7     | 10    | 7    | 17    | 5     | 3     | 5    | 3    | 5   | +    | +    | 2    | .    | +    | 7    | 3    | 5    | 5    | 2    | 5    | 3    | 3    | .    | V  | V   |     |    |    |   |
| <i>Artemisia pycnorhiza</i>                                 | +   | 2     | 2    | 2     | +     | +     | +    | +    | +     | 2     | 2     | 3    | +     | +    | 5    | 3     | 3     | 2    | +     | +     | +     | +     | 2     | +     | +    | +     | +     | +     | +    | +    | +   | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +  | V   | II  |    |    |   |



| Номер в таблице  | 1  | 2  | 3 | 4 | 5 | 6 | 7  | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45  | a   | b   |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
|--|----|----|---|---|---|---|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---|---|---|-----|----|---|---|-----|---|---|----|----|---|----|----|-----|
| <i>Stellaria petraea</i>                                 | +  | .  | . | . | + | + | .  | + | +  | .  | +  | 8  | .  | +  | .  | .  | +  | 3  | +  | +  | 2  | +  | .  | .  | 3  | 3  | 2  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | IV  | .   |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Eremogone meyeri</i>                                  | +  | +  | . | . | 2 | + | .  | . | +  | .  | +  | .  | 5  | 2  | .  | .  | +  | .  | 2  | .  | +  | .  | +  | +  | 3  | 2  | 2  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | III | .   |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Eritrichium pulviniforme</i>                          | 2  | .  | . | . | . | . | .  | . | +  | +  | 20 | .  | 3  | .  | .  | 2  | 2  | +  | 3  | .  | .  | .  | +  | +  | 3  | +  | 2  | 5  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | III | .   |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Patrinia sibirica</i>                                 | .  | 5  | + | + | . | . | +  | . | .  | 2  | .  | +  | .  | +  | +  | 5  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | II  | . |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Minuartia verna</i>                                   | .  | +  | . | . | . | . | +  | . | +  | .  | +  | +  | .  | +  | .  | +  | .  | .  | 2  | .  | .  | .  | +  | .  | .  | +  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | II  | . |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Pachyneurum grandiflorum</i>                          | +  | +  | . | + | . | . | .  | . | +  | +  | +  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | II  | . |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Pulsatilla ambigua</i>                                | 2  | .  | . | . | . | . | .  | 2 | .  | .  | +  | .  | .  | 2  | +  | 2  | +  | +  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | +  | 2  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | III | . |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| Д.в. пор. <i>Helictotrichetalia schelliani</i>           |    |    |   |   |   |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Aster alpinus</i>                                     | 2  | 5  | 5 | 5 | 3 | + | 2  | 2 | 2  | 2  | 5  | 5  | .  | 3  | 3  | 2  | +  | 3  | +  | +  | +  | +  | +  | 2  | 5  | .  | 2  | 3  | 5  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | V   | . |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Carex pediformis</i>                                  | 20 | 15 | 2 | 8 | . | . | 5  | 5 | 10 | 20 | +  | .  | .  | +  | +  | 5  | .  | .  | .  | 7  | .  | 12 | 8  | 15 | 7  | .  | 5  | 5  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | IV  | . |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Helictotrichon altaicum</i>                           | 12 | +  | . | 5 | . | . | .  | . | 3  | .  | .  | .  | .  | .  | 3  | +  | .  | .  | 12 | .  | 7  | 10 | 3  | 5  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II  | +   |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Helictotrichon schellianum</i>                        | 2  | +  | . | . | . | . | 15 | + | +  | .  | .  | .  | .  | .  | +  | .  | 2  | .  | 7  | .  | .  | 2  | 10 | 3  | .  | +  | .  | 8  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | III | .   |     |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Potentilla sericea</i>                                | +  | +  | 2 | 2 | 2 | 2 | +  | + | 2  | 2  | 3  | +  | 3  | +  | +  | 2  | +  | +  | 2  | +  | +  | +  | +  | .  | 2  | +  | 2  | +  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | V   | I   |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Coluria geoides</i>                                   | .  | .  | . | . | . | . | +  | + | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | .  | .  | +  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | I   | . |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| Д.в. ас. <i>Astragalo brevifoliae–Stipetum glareosae</i> |    |    |   |   |   |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Astragalus brevifolius</i>                            | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | +  | 2  | 3  | 10  | 2   | +   | 5 | 2 | + | +   | +  | . | 3 | .   | V |   |    |    |   |    |    |     |
| <i>Stipa glareosa</i>                                    | .  | .  | . | . | + | . | 2  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | 3  | +  | 2  | 3   | +   | +   | 5 | 3 | . | +   | 2  | 2 | 3 | +   | V |   |    |    |   |    |    |     |
| <i>Arctogeron gramineum</i>                              | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 7  | 3  | 2  | 5  | .   | 15  | +   | 7 | . | . | 5   | .  | . | . | III |   |   |    |    |   |    |    |     |
| Д.в. союза <i>Kochio prostratae–Stipion krylovii</i>     |    |    |   |   |   |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Astragalus dilutus</i>                                | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | + | 2 | +   | +  | . | . | +   | . | . | .  | +  | . | +  | .  | III |
| <i>Gypsophila desertorum</i>                             | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | . | . | +   | 3  | + | + | .   | . | + | +  | .  | . | .  | .  | II  |
| <i>Kochia prostrata</i>                                  | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | . | . | .   | .  | + | + | +   | 3 | . | 3  | .  | . | II |    |     |
| <i>Krascheninnikovia ceratoides</i>                      | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | . | . | .   | 2  | . | . | +   | . | + | +  | .  | + | .  | II |     |
| <i>Convolvulus ammanii</i>                               | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | . | . | 2   | +  | . | 3 | +   | . | + | .  | .  | . | .  | .  | II  |
| <i>Dontostemon integrifolius</i>                         | .  | .  | . | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | . | . | .   | .  | + | + | .   | + | . | .  | .  | + | .  | II |     |
| Д.в. класса <i>Cleistogenetea squarrosae</i>             |    |    |   |   |   |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Poa attenuata</i>                                     | 12 | 2  | + | 3 | 7 | 3 | +  | 5 | 10 | 2  | 3  | +  | 3  | +  | .  | 7  | 7  | .  | 2  | 3  | 2  | 5  | 5  | 20 | 3  | 3  | 5  | 7  | 3  | 5  | +  | 3  | +  | +  | +  | +  | .  | 2  | 2  | +  | 2  | 7  | 3  | 2  | .   | V   | V   |   |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Artemisia frigida</i>                                 | .  | .  | . | 2 | 7 | 3 | 2  | 5 | .  | .  | .  | .  | 7  | .  | 3  | .  | 25 | 3  | 3  | +  | 5  | 3  | 5  | 3  | +  | 5  | 5  | .  | .  | 10 | 10 | 7  | 7  | 8  | 2  | +  | .  | 20 | 17 | 5  | 15 | 10 | 7  | 3  | 20  | .   | IV  | V |   |   |     |    |   |   |     |   |   |    |    |   |    |    |     |
| <i>Orostachys spinosa</i>                                | +  | +  | + | . | . | . | 3  | + | +  | +  | +  | .  | +  | +  | 2  | .  | .  | .  | .  | .  | +  | +  | 2  | .  | +  | .  | +  | .  | +  | +  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | . | . | III | II |   |   |     |   |   |    |    |   |    |    |     |
| <i>Potentilla acaulis</i>                                | .  | .  | + | 2 | . | 3 | 2  | 2 | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | 3  | 5  | 3  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | . | . | + | +   | +  | . | . | +   | . | . | II | II |   |    |    |     |

| Номер в таблице                    | 1 | 2 | 3 | 4 | 5 | 6  | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a   | b   |     |    |   |
|------------------------------------|---|---|---|---|---|----|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|----|---|
| <i>Ephedra pseudodistachya</i>     | + | . | . | . | + | +  | + | . | . | .  | +  | .  | 3  | .  | +  | .  | +  | .  | 3  | .  | +  | .  | .  | .  | .  | +  | .  | +  | .  | .  | +  | 3  | +  | +  | .  | .  | .  | .  | .  | 2  | +  | +  | .  | +  | .  | II  | III |     |    |   |
| <i>Potentilla bifurca</i>          | . | . | + | . | . | .  | + | + | . | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | .  | 2  | +  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | II | I   |     |     |    |   |
| <i>Stipa krylovii</i>              | . | . | . | . | . | .  | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | 3  | 5  | 3  | 2  | 10 | .  | 2  | 2  | +  | .  | +  | 2  | 12 | 7  | .   | V   |     |    |   |
| <i>Heteropappus altaicus</i>       | . | . | . | . | . | .  | + | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | +  | .  | +  | +  | .  | .  | .  | .  | .  | .  | +  | +  | +  | III |     |     |    |   |
| <i>Carex duriuscula</i>            | . | . | + | . | . | .  | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | 3  | .  | 2  | 2  | .  | 2  | .  | .  | 3  | +  | 10 | .  | .  | +  | III |     |     |    |   |
| <i>Caragana pygmaea</i>            | . | . | . | . | . | .  | + | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | +  | .  | 2  | 3  | 2  | 5  | .  | .  | +  | +  | +  | III |     |     |    |   |
| <i>Agropyron cristatum</i>         | . | . | . | . | 6 | 10 | 2 | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | 6  | 10 | 2  | .  | .  | .  | .  | .  | .  | .  | 4  | 14 | 10 | 14 | 6  | 19 | 10 | 6  | 6  | 10 | 6  | 10 | 6  | 10 | 15 | II  | V   |     |    |   |
| <i>Goniolimon speciosum</i>        | . | . | . | + | . | .  | + | + | . | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | .  | +  | +  | +   | I   | V   |    |   |
| <i>Bupleurum bicaule</i>           | . | . | . | . | . | .  | 2 | . | . | .  | .  | +  | .  | .  | +  | .  | .  | .  | .  | .  | +  | +  | +  | .  | .  | .  | .  | .  | .  | +  | 2  | 3  | .  | +  | +  | 2  | +  | +  | +  | +  | +  | .  | 2  | +  | I  | V   |     |     |    |   |
| Прочие виды                        |   |   |   |   |   |    |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |    |   |
| <i>Silene graminifolia</i>         | . | + | + | . | 3 | +  | . | . | + | +  | .  | +  | .  | +  | .  | .  | +  | .  | .  | +  | +  | +  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | III | .  |   |
| <i>Androsace dasyphylla</i>        | . | + | 8 | . | 5 | +  | 3 | + | . | 3  | .  | 7  | .  | 7  | .  | .  | 3  | .  | .  | .  | +  | +  | .  | .  | .  | +  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +   | .   | III | +  |   |
| <i>Clausia aprica</i>              | . | . | + | . | . | +  | . | + | . | .  | .  | .  | +  | +  | +  | +  | .  | +  | +  | .  | +  | .  | .  | 2  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | III | .  |   |
| <i>Xanthopaemelia camschadalis</i> | + | + | . | . | + | .  | + | + | + | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | +  | .  | .  | +  | 2  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | II  | .  |   |
| <i>Astragalus multicaulis</i>      | . | . | 2 | + | . | .  | . | + | . | .  | .  | .  | +  | .  | +  | .  | 2  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | +   | .   | II | + |
| <i>Pedicularis achilleifolia</i>   | + | + | . | + | . | .  | + | . | . | +  | 2  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | +  | 2  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II  | .   |    |   |
| <i>Androsace septentrionalis</i>   | + | . | + | + | . | .  | . | + | . | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | +  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II  | .   |    |   |
| <i>Gentiana decumbens</i>          | . | . | . | . | . | .  | + | + | . | .  | .  | +  | .  | .  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | II  | .  |   |
| <i>Cerastium arvense</i>           | . | . | . | . | . | .  | 3 | . | . | .  | .  | .  | .  | .  | .  | .  | +  | .  | 2  | .  | .  | .  | 3  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | I   | .   |    |   |
| <i>Erysimum flavum</i>             | . | . | . | . | + | .  | . | . | . | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | +  | +  | 2  | .  | .  | .  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II  | .   |    |   |
| <i>Leontopodium ochroleucum</i>    | . | . | + | . | . | .  | + | 3 | . | .  | .  | .  | .  | 2  | .  | .  | 5  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | 12 | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II  | .   |    |   |
| <i>Kobresia filifolia</i>          | + | . | . | 2 | . | .  | . | . | + | 3  | .  | .  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II  | .   |    |   |
| <i>Iris potaninii</i>              | . | . | . | + | . | .  | + | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | +   | II  |    |   |
| <i>Sibbaldianthe adpressa</i>      | . | . | . | . | . | .  | . | . | . | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | +  | +  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | +   | II  |     |    |   |
| <i>Saussurea pricei</i>            | . | . | . | . | 2 | .  | 2 | . | . | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | +  | .  | .  | .  | +  | .  | +  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | I   | II  |     |    |   |
| <i>Allium rubens</i>               | . | . | . | . | . | .  | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | 2  | .  | +  | +  | 3  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .   | +   | II  |    |   |

**Примечание.** С I классом постоянства отмечены: *Aconogonon alpinum* (2 - 2, 20 - 4, 23 - 2); *Alectoria nigricans* (11 - 2); *Allium anisopodium* (20 ); *A. mongolicum* (35 ); *Androsace lehmanniana* (14, 19 ); *Artemisia caespitosa* (34, 36 - 2, 44 - 7); *A. glauca* (31, 32 ); *A. macrocephala* (33 ); *A. phaeolepis* (8 - 2, 28 - 2, 30 ); *A. santolinifolia* (18, 36 - 3, 42 ); *Astragalus adsurgens* (29, 30 - 2, 33 ); *A. laguroides* (33 ); *A. testiculatus* (31, 33, 34 ); *Berberis sibirica* (3, 29 ); *Caragana bungei* (3, 7 - 5, 42 - 20); *Carex obtusata* (9 - 3); *Chamaerhodos*

*erecta* (20 ); *Chenopodium frutescens* (35, 45 ); *Ch. species* (43 ); *Cotoneaster uniflorus* (8 ); *Dracocephalum fruticosum* (32 ); *Elytrigia geniculata* (14 ); *Euphorbia tshuiensis* (32, 44 ); *Flavocetraria nivalis* (29 ); *Galium verum* (18, 20, 29 ); *Gentiana grandiflora* (24 ); *Gypsophila patrinii* (32 ); *Iris bloudowii* (30 ); *Kitagawia baicalensis* (7, 20 - 3); *Kobresia myosuroides* (13 - 2, 14 - 5, 19 - 2, 28 5, 29 - 3); *Nanophyton grubovii* (35 - 3, 45 - 3); *Oxytropis ladyginii* (28 ); *O. oligantha* (5 - 2, 10, 13, 19 - 3, 28 ); *O. oxyphylla* (31, 42 ); *O.s strobilacea* (15, 18, 26, 30 ); *O tragacanthoides* (6 - 7, 12, 20, 21 - 2); *O trichophysa* (37, 44 - 2); *Pachypleurum alpinum* (17 ); *Panzerina lanata* (31, 32 - 2, 34 ); *Papaver nudicaule* (10, 14, 16, 18 ); *Peucedanum vaginatum* (21, 30 ); *Phlojodicarpus villosus* (12 - 3, 14, 29 ); *Potentilla nivea* (14 ); *P. nudicaulis* (30, 42 ); *Saussurea schanginiana* (9, 10, 14 ); *Saxifraga sibirica* (14 ); *Schizonepeta multifida* (7 ); *Scorzonera ikonnikovii* (22, 32 ); *Sedum hybridum* (20 ); *Silene repens* (25, 28 ); *Stellaria dichotoma* (7, 32 ); *Stevenia cheiranthoides* (2 - 3, 7, 22, 23, 27 ); *Taraxacum species* (5 ); *Tephroses praticola* (8 ); *Thalictrum foetidum* (7, 20, 30, 40 ); *Thesium refractum* (2, 20, 37 ); *Thymus serpyllum* (7, 25 ); *Veronica incana* (3, 7, 8 - 3, 15, 29 - 3); *V. pinnata* (31, 33 ); *Youngia tenuifolia* (6, 13, 22 - 2, 23 )

#### Локалитеты описаний:

| Номер в таблице | Номер в фитоценоотеке | Район             | Локалитет                       | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|-----------------------|-------------------|---------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 1               | 36599                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3    | 2358                | 50.3815        | 90.0858         | 26.06.2006 | Макунина Н.И. |
| 2               | 36627                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 27км на запад | 2205                | 50.409         | 90.1068         | 29.06.2006 | Макунина Н.И. |
| 3               | 7641                  | Овюрский          | окр с.Торгалык                  | 2008                | 50.8788        | 92.41413        | 08.08.2014 | Макунина Н.И. |
| 4               | 36601                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3    | 2288                | 50.3788        | 90.0878         | 26.06.2006 | Макунина Н.И. |
| 5               | 36637                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 27км на запад | 2170                | 50.409         | 90.1167         | 29.06.2006 | Макунина Н.И. |
| 6               | 36638                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 27км на запад | 2185                | 50.4083        | 90.1162         | 29.06.2006 | Макунина Н.И. |
| 7               | 7622                  | Овюрский          | окр с.Торгалык                  | 1810                | 50.85529       | 92.4413         | 06.08.2014 | Макунина Н.И. |
| 8               | 7640                  | Овюрский          | окр с.Торгалык                  | 2031                | 50.8803        | 92.4141         | 08.08.2014 | Макунина Н.И. |
| 9               | 36604                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3    | 2377                | 50.3845        | 90.0838         | 27.06.2006 | Макунина Н.И. |
| 10              | 36606                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3    | 2377                | 50.3925        | 90.0777         | 27.06.2006 | Макунина Н.И. |
| 11              | 36616                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3    | 2280                | 50.3822        | 90.1143         | 28.06.2006 | Макунина Н.И. |
| 12              | 7634                  | Овюрский          | окр с.Торгалык                  | 1835                | 50.86681       | 92.43082        | 07.08.2014 | Макунина Н.И. |
| 13              | 35639                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 15км на Ю-Ю-3 | 2460                | 50.321         | 90.2235         | 07.07.2005 | Макунина Н.И. |
| 14              | 7083                  | Овюрский          | окр с.Дус-Даг                   | 2143                | 50.90809       | 92.55981        | 08.08.2009 | Макунина Н.И. |
| 15              | 7645                  | Овюрский          | окр с.Торгалык                  | 2120                | 50.91542       | 92.41212        | 09.08.2014 | Макунина Н.И. |
| 16              | 36613                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3    | 2285                | 50.3815        | 90.0948         | 27.06.2006 | Макунина Н.И. |
| 17              | 36614                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3    | 2295                | 50.3812        | 90.1133         | 28.06.2006 | Макунина Н.И. |
| 18              | 7646                  | Овюрский          | окр с.Торгалык                  | 2184                | 50.91587       | 92.4147         | 09.08.2014 | Макунина Н.И. |
| 19              | 35640                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 15км на Ю-Ю-3 | 2470                | 50.3207        | 90.2217         | 07.07.2005 | Макунина Н.И. |
| 20              | 36649                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 25км на запад | 2179                | 50.4028        | 90.1515         | 30.06.2006 | Макунина Н.И. |
| 21              | 36652                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 25км на запад | 2195                | 50.4028        | 90.1498         | 30.06.2006 | Макунина Н.И. |
| 22              | 36655                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 25км на запад | 2132                | 50.3968        | 90.14333        | 01.07.2006 | Макунина Н.И. |
| 23              | 36653                 | Монгун-Тайгинский | окр с.Мугур-Аксы, 25км на запад | 2130                | 50.4           | 90.1468         | 30.06.2006 | Макунина Н.И. |

| Номер в таблице | Номер в фитоцентеке | Район             | Локалитет                         | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|---------------------|-------------------|-----------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 24              | 36636               | Монгун-Тайгинский | окр с.Мугур-Аксы, 27км на запад   | 2325                | 50.3995        | 90.0758         | 29.06.2006 | Макунина Н.И. |
| 25              | 8844                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 2133                | 50.43095       | 90.00145        | 08.08.2021 | Макунина Н.И. |
| 26              | 36619               | Монгун-Тайгинский | окр с.Мугур-Аксы, 26км Ю-3-3      | 2390                | 50.3778        | 90.1207         | 28.06.2006 | Макунина Н.И. |
| 27              | 36629               | Монгун-Тайгинский | окр с.Мугур-Аксы, 27км на запад   | 2195                | 50.4093        | 90.1037         | 29.06.2006 | Макунина Н.И. |
| 28              | 35646               | Монгун-Тайгинский | окр с.Мугур-Аксы, 15км на Ю-Ю-3   | 2320                | 50.3167        | 90.2363         | 07.07.2005 | Макунина Н.И. |
| 29              | 7088                | Овюрский          | окр с.Дус-Даг                     | 2108                | 50.9053        | 92.56578        | 08.08.2009 | Макунина Н.И. |
| 30              | 7668                | Овюрский          | Устье Р.Арзайты                   | 1820                | 50.48524       | 90.74206        | 14.08.2014 | Макунина Н.И. |
| 31              | 8837                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1909                | 50.39834       | 90.4598         | 08.08.2021 | Макунина Н.И. |
| 32              | 8838                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1958                | 50.39848       | 90.47691        | 08.08.2021 | Макунина Н.И. |
| 33              | 8839                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 2029                | 50.41561       | 90.41221        | 08.08.2021 | Макунина Н.И. |
| 34              | 8836                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1906                | 50.40047       | 90.44203        | 08.08.2021 | Макунина Н.И. |
| 35              | 8828                | Монгун-Тайгинский | долина р. Каргы у погранзаставы   | 1802                | 50.2714        | 90.6015         | 07.08.2021 | Макунина Н.И. |
| 36              | 8829                | Монгун-Тайгинский | окр погранзаставы                 | 1880                | 50.27343       | 90.57168        | 07.08.2021 | Макунина Н.И. |
| 37              | 8830                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 2073                | 50.30472       | 90.53017        | 07.08.2021 | Макунина Н.И. |
| 38              | 8831                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1883                | 50.37071       | 90.43383        | 07.08.2021 | Макунина Н.И. |
| 39              | 8832                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1877                | 50.37122       | 90.43468        | 07.08.2021 | Макунина Н.И. |
| 40              | 8833                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1855                | 50.38045       | 90.41742        | 07.08.2021 | Макунина Н.И. |
| 41              | 8834                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1894                | 50.37906       | 90.40905        | 07.08.2021 | Макунина Н.И. |
| 42              | 8835                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1866                | 50.39208       | 90.38281        | 07.08.2021 | Макунина Н.И. |
| 43              | 8848                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1955                | 50.41641       | 90.23652        | 08.08.2021 | Макунина Н.И. |
| 44              | 8851                | Монгун-Тайгинский | окр с.Мугур-Аксы Спуск С Перевала | 1938                | 50.30376       | 90.53076        | 09.08.2021 | Макунина Н.И. |
| 45              | 8852                | Монгун-Тайгинский | окр с.Мугур-Аксы                  | 1807                | 50.27165       | 90.59717        | 09.08.2021 | Макунина Н.И. |

Ассоциации *Carici pediformis*–*Caraganelum bungei* (1-15), *Galio coriacei*–*Selaginellum sanguinolentae* (16-30),  
*Androsaco dasyphyllae*–*Agropyretum cristati* (31-45)

Associations *Carici pediformis*–*Caraganelum bungei* (1-15), *Galio coriacei*–*Selaginellum sanguinolentae* (16-30),  
*Androsaco dasyphyllae*–*Agropyretum cristati* (31-45)

| Номер в таблице  | 1  | 2    | 3     | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12    | 13    | 14    | 15   | 16   | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28    | 29    | 30   | 31   | 32   | 33    | 34    | 35    | 36    | 37    | 38   | 39   | 40   | 41    | 42    | 43    | 44    | 45   | a  | b  | c   |    |   |   |
|--|--|------|-------|------|------|------|------|------|------|------|------|-------|-------|-------|------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|------|--|------|-------|-------|-------|-------|-------|------|------|------|-------|-------|-------|-------|------|----|----|-----|----|---|---|
| Ассоциация   | <i>Carici pediformis</i> – <i>Caraganelum bungei</i> (a) |      |       |      |      |      |      |      |      |      |      |       |       |       |      | <i>Galio coriacei</i> – <i>Selaginellum sanguinolentae</i> (b) |       |       |       |       |       |       |       |       |       |      |      |       |       |      | <i>Androsaco dasyphyllae</i> – <i>Agropyretum cristati</i> (c) |      |       |       |       |       |       |      |      |      |       |       |       |       |      |    |    |     |    |   |   |
| Номер в фитоценологе   | 37376  | 7051 | 37381 | 2532 | 8858 | 5942 | 5988 | 7685 | 7095 | 8308 | 7099 | 37488 | 37495 | 37526 | 8604 | 12478  | 12490 | 12492 | 12493 | 12495 | 12496 | 12526 | 12523 | 12525 | 12529 | 5164 | 7692 | 36579 | 36700 | 8328 | 36589  | 8868 | 36584 | 36581 | 37433 | 37434 | 37426 | 7619 | 7627 | 7638 | 37418 | 37403 | 37402 | 37404 | 8855 |    |    |     |    |   |   |
| Высота, м над ур. м.   | 1464   | 1896 | 1710  | 1595 | 1582 | 1436 | 1248 | 1773 | 1032 | 1552 | 1002 | 1089  | 1118  | 1112  | 1281 | 1270   | 1310  | 1350  | 1360  | 1470  | 1460  | 1245  | 1245  | 1245  | 1270  | 727  | 1633 | 780   | 1655  | 1707 | 1730   | 1699 | 1835  | 1760  | 1775  | 1758  | 1630  | 1791 | 1757 | 1929 | 1904  | 1700  | 1818  | 1736  | 2000 |    |    |     |    |   |   |
| Экспозиция, °  | 25   | 170  | 360   | 180  | 110  | 130  | 300  | 200  | 220  | 300  | 330  | 130   | 130   | 110   | 200  | 135  | 225   | 270   | 90    | 270   | 270   | 225   | 180   | 180   | 270   | 260  | 180  | 50    | 70    | 180  | 180  | 300  | 250   | 25    | 80    | 130   | 30    | 180  | 110  | 200  | 20    |       |       |       |      |    |    |     |    |   |   |
| Крутизна, °  | 15   | 30   | 30    | 15   | 3    | 10   | 15   | 22   | 15   | 5    | 15   | 28    | 27    | 20    | 15   | 15   | 25    | 30    | 25    | 25    | 25    | 15    | 15    | 25    | 17    | 17   | 30   | 30    | 25    | 10   | 15   | 7    | 17    | 20    | 27    | 9     | 17    | 7    | 7    | 20   | 17    | 30    | 23    | 7     |      |    |    |     |    |   |   |
| ПП кустарников, %  | 5  |      |       | 20   |      | 25   |      | 20   | 15   | 15   | 20   | 30    |       | 25    | 7    |  |       |       | 25    |       | 15    |       |       |       |       |      | 10   | 20    | 10    |      |  |      |       | 20    | 25    | 15    |       |      |      | 15   | 7     |       |       |       |      |    |    |     |    |   |   |
| ПП травостоя, %  | 60   | 70   | 65    | 30   | 50   | 45   | 45   | 50   | 40   | 70   | 40   | 30    | 40    | 40    | 70   | 50   | 40    | 65    | 40    | 40    | 70    | 40    | 55    | 40    | 50    | 40   | 40   | 35    | 50    | 50   | 35   | 50   | 60    | 70    | 45    | 50    | 50    | 40   | 40   | 40   | 40    | 50    | 40    | 50    | 1    | 2  | 3  |     |    |   |   |
| Число видов  | 34   | 31   | 29    | 31   | 28   | 28   | 41   | 32   | 32   | 19   | 35   | 25    | 24    | 21    | 32   | 33   | 30    | 30    | 37    | 44    | 30    | 42    | 28    | 34    | 31    | 31   | 27   | 36    | 34    | 21   | 38   | 23   | 30    | 35    | 31    | 35    | 28    | 29   | 26   | 25   | 25    | 30    | 29    | 35    | 26   | 15 | 15 | 15  |    |   |   |
| Д.в. асс. <i>Carici pediformis</i> – <i>Caraganelum bungei</i>       |  |      |       |      |      |      |      |      |      |      |      |       |       |       |      |  |       |       |       |       |       |       |       |       |       |      |      |       |       |      |  |      |       |       |       |       |       |      |      |      |       |       |       |       |      |    |    |     |    |   |   |
| <i>Caragana bungei</i>   | 5  | .    | 2     | 2    | 10   | .    | 10   | +    | 20   | .    | 10   | 2     | .     | .     | 20   | .  | .     | +     | .     | 3     | .     | 5     | .     | .     | +     | .    | .    | .     | .     | .    | 2  | .    | .     | .     | 18    | 18    | 15    | .    | .    | .    | .     | 15    | .     | 7     | .    | IV | II | II  |    |   |   |
| <i>Agropyron cristatum</i>   | 10   | 3    | 4     | 4    | 6    | 10   | 2    | 2    | 5    | 4    | +    | 2     | 2     | 4     | 3    | .  | .     | .     | .     | .     | .     | .     | .     | .     | .     | .    | .    | .     | .     | .    | 6  | 4    | .     | 3     | 6     | 4     | 6     | .    | .    | 2    | 2     | 6     | 6     | 3     | .    | V  | .  | IV  |    |   |   |
| Д.в. асс. <i>Galio coriacei</i> – <i>Selaginellum sanguinolentae</i> |  |      |       |      |      |      |      |      |      |      |      |       |       |       |      |  |       |       |       |       |       |       |       |       |       |      |      |       |       |      |  |      |       |       |       |       |       |      |      |      |       |       |       |       |      |    |    |     |    |   |   |
| <i>Elytrigia geniculata</i>  | .  | .    | .     | .    | .    | .    | .    | .    | .    | .    | .    | 2     | .     | .     | +    | 3  | 3     | +     | 7     | 5     | 3     | 5     | 2     | 3     | 5     | 2    | 5    | 5     | 7     | 10   | .  | .    | .     | .     | .     | .     | .     | .    | .    | .    | .     | .     | .     | .     | .    | .  | .  | .   | I  | V | . |
| <i>Galium verum</i>  | .  | +    | +     | .    | .    | .    | .    | +    | .    | .    | +    | .     | .     | .     | .    | +  | 2     | +     | +     | 2     | +     | 2     | +     | +     | +     | 2    | +    | +     | .     | .    | .  | .    | +     | +     | .     | .     | .     | .    | .    | .    | .     | .     | .     | .     | .    | .  | .  | II  | V  | I |   |
| <i>Polygala sibirica</i> + <i>P. tenuifolia</i>                      | .  | .    | .     | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .     | .    | +  | 2     | .     | +     | +     | +     | +     | +     | +     | +     | 4    | .    | +     | .     | .    | .  | .    | .     | .     | .     | .     | .     | .    | .    | .    | .     | .     | .     | .     | .    | .  | .  | .   | IV | . |   |
| <i>Chamaerhodos erecta</i>   | .  | .    | .     | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .     | .    | +  | +     | .     | .     | +     | .     | +     | 2     | +     | .     | +    | .    | +     | +     | .    | .  | .    | .     | .     | .     | .     | .     | .    | .    | .    | .     | .     | .     | .     | .    | .  | .  | III | .  |   |   |
| <i>Oxytropis intermedia</i>  | .  | .    | .     | .    | .    | .    | .    | .    | .    | .    | +    | .     | .     | .     | .    | +  | 2     | 3     | +     | +     | +     | +     | 2     | +     | +     | .    | +    | .     | +     | +    | .  | .    | .     | .     | .     | .     | .     | .    | .    | .    | .     | .     | .     | .     | .    | .  | .  | +   | V  | . |   |
| <i>Euphorbia tshuiensis</i>  | .  | .    | .     | .    | .    | .    | .    | .    | +    | .    | .    | .     | .     | .     | .    | +  | +     | .     | +     | +     | +     | +     | +     | +     | .     | .    | .    | +     | .     | .    | .  | .    | .     | .     | .     | .     | .     | .    | .    | .    | .     | .     | .     | .     | .    | .  | +  | III | I  |   |   |
| <i>Youngia tenuifolia</i> (ES)                                       | .  | .    | .     | +    | .    | .    | 2    | .    | .    | .    | .    | .     | .     | .     | .    | +  | +     | 2     | 3     | 2     | 2     | 2     | +     | +     | .     | 2    | .    | +     | .     | .    | +  | .    | .     | .     | .     | .     | .     | .    | .    | .    | .     | .     | .     | .     | .    | +  | .  | I   | IV | I |   |



| Номер в таблице                    | 1 | 2 | 3 | 4 | 5 | 6 | 7  | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a  | b   | c   |     |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
|------------------------------------|---|---|---|---|---|---|----|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|----|----|----|----|-----|----|-----|----|----|----|---|---|----|---|----|
| <i>Caragana pugnata</i>            | + | . | . | + | + | 3 | 10 | + | + | 15 | .  | 18 | 30 | 3  | 5  | 7  | +  | +  | 3  | 7  | 2  | 2  | 2  | 2  | .  | +  | +  | 3  | 15 | 10 | +  | .  | .  | +  | 2  | .  | +  | +  | .  | .  | .  | +  | 5  | 2  | .  | IV | V   | III |     |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Orostachys spinosa</i>          | + | + | . | . | + | . | 5  | + | + | 2  | +  | .  | .  | 2  | +  | +  | +  | +  | +  | +  | +  | +  | .  | +  | +  | +  | +  | .  | 2  | +  | 2  | .  | +  | .  | +  | +  | .  | +  | .  | +  | 5  | .  | +  | +  | .  | IV | V   | III |     |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Ephedra monosperma</i>          | + | + | + | + | . | + | +  | . | + | +  | .  | 2  | +  | +  | .  | .  | +  | .  | .  | .  | .  | +  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | +  | +  | +  | .  | .  | +  | 2  | 2  | 2  | +  | IV | II  | III |     |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Potentilla bifurca</i>          | + | + | + | . | + | . | +  | + | + | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | +  | +  | .  | .  | .  | +  | III | I   | II  |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Goniolimon speciosum</i>        | . | + | + | + | + | + | +  | . | + | .  | +  | +  | 2  | .  | +  | .  | +  | .  | +  | +  | +  | .  | +  | +  | +  | .  | +  | .  | .  | 2  | +  | +  | .  | .  | +  | .  | +  | +  | .  | +  | +  | .  | +  | +  | .  | +  | IV  | III | III |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Heterorappus altaicus</i>       | + | . | . | + | . | . | .  | + | + | .  | .  | .  | +  | .  | 3  | .  | .  | .  | .  | .  | .  | 2  | +  | .  | .  | .  | +  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +   | +   | +   | II | II | II |    |     |    |     |    |    |    |   |   |    |   |    |
| Прочие виды                        |   |   |   |   |   |   |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Bupleurum bicaule</i>           | 2 | . | 2 | 2 | + | 7 | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | +   | V  |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Dianthus versicolor</i>         | + | + | + | + | + | + | +  | + | + | 2  | .  | .  | +  | +  | +  | +  | +  | .  | +  | +  | +  | +  | +  | +  | +  | 2  | .  | .  | 2  | 2  | +  | .  | .  | .  | +  | +  | +  | +  | +  | +  | 2  | 2  | 2  | +  | +  | .  | V   | IV  | IV  |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Veronica incana</i>             | + | 3 | 2 | . | . | . | +  | 3 | . | +  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | 2  | +  | +  | .  | .  | 2  | .  | .  | 3  | .  | 3  | 3  | +  | +  | +  | +  | .  | 5  | 2  | .  | .  | .  | .  | III | II  | III |    |    |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Artemisia santolinifolia</i>    | . | 5 | . | . | . | . | .  | + | . | +  | .  | 3  | 2  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | +  | I  |    |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Kochia prostrata</i>            | . | . | . | . | . | 2 | 2  | . | 2 | .  | .  | +  | 2  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | +  | I  |    |     |    |     |    |    |    |   |   |    |   |    |
| <i>Xanthopaemelia camschadalis</i> | + | . | . | . | . | + | 3  | . | 3 | +  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | +  | 5  | .  | .  | .   | 3  | II  | .  | II |    |   |   |    |   |    |
| <i>Achnatherum sibiricum</i>       | . | . | . | . | . | . | 2  | . | 2 | .  | 4  | 2  | .  | .  | 6  | .  | .  | .  | .  | .  | 4  | .  | 2  | .  | .  | .  | 4  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | 2  | .  | II | I   | +  |     |    |    |    |   |   |    |   |    |
| <i>Stellaria dichotoma</i>         | . | . | . | + | . | . | 2  | . | + | .  | .  | +  | +  | .  | .  | +  | +  | .  | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | +  | II | II | I   |    |     |    |    |    |   |   |    |   |    |
| <i>Thalictrum foetidum</i>         | + | + | + | . | + | . | .  | . | . | .  | .  | .  | .  | .  | 2  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | 2  | .  | +  | .   | .  | 2   | 2  | .  | .  | . | . | II | I | II |
| <i>Stipa capillata</i>             | . | . | . | . | . | . | .  | . | . | 2  | .  | 2  | 10 | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | II | I   | .  |     |    |    |    |   |   |    |   |    |
| <i>Carex duriuscula</i>            | . | . | . | . | 3 | . | .  | 2 | . | 3  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | +  | II | .   | I  |     |    |    |    |   |   |    |   |    |
| <i>Berberis sibirica</i>           | + | . | . | 3 | . | . | 2  | . | . | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | 2  | +  | .  | .  | 7  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | 5  | .  | +  | .   | .  | .   | .  | II | II | I |   |    |   |    |
| <i>Cotoneaster melanocarpus</i>    | + | 2 | + | . | . | . | .  | + | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | 3  | 7  | +  | 7  | .  | 2  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | II | III | .  |     |    |    |    |   |   |    |   |    |
| <i>Iris potaninii</i>              | + | . | . | + | . | + | .  | . | + | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | 3  | 2  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | +  | +  | .   | II | II  | II |    |    |   |   |    |   |    |
| <i>Bupleurum scorzonerifolium</i>  | . | . | . | . | . | . | .  | . | . | .  | .  | .  | .  | .  | 5  | +  | 3  | +  | 2  | 2  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | .  | .   | +  | III | .  |    |    |   |   |    |   |    |
| <i>Allium austrosibiricum</i>      | . | . | . | + | . | . | .  | . | + | .  | .  | .  | .  | .  | 3  | .  | 2  | .  | 2  | .  | .  | +  | .  | +  | .  | 5  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | .  | I   | II | .   |    |    |    |   |   |    |   |    |
| <i>Aconogonon alpinum</i>          | . | 2 | . | . | . | . | 2  | . | . | .  | .  | .  | .  | .  | .  | .  | 2  | 2  | +  | 2  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | 2  | 2   | .  | .   | I  | II | I  |   |   |    |   |    |
| <i>Sedum hybridum</i>              | . | 2 | . | . | . | . | 2  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | 2  | .  | +  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | .  | I   | II | .   |    |    |    |   |   |    |   |    |
| <i>Vicia costata</i>               | . | . | . | . | . | . | .  | . | . | .  | .  | .  | .  | .  | .  | 5  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | .  | .   | II | .   |    |    |    |   |   |    |   |    |
| <i>Alyssum lenense</i>             | + | . | . | . | . | . | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | +  | .  | +  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | +  | +   | +  | .   | +  | II | II |   |   |    |   |    |
| <i>Echinops humilis</i>            | . | . | . | . | . | . | .  | . | . | .  | .  | .  | .  | .  | .  | +  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | .  | .   | II | .   |    |    |    |   |   |    |   |    |
| <i>Erysimum flavum</i>             | . | . | . | . | . | + | +  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | .  | .   | I  | +   | II |    |    |   |   |    |   |    |
| <i>Chamaerhodos altaica</i>        | . | . | . | + | . | . | .  | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .  | .  | .  | .   | +  | .   | II |    |    |   |   |    |   |    |

**Примечание.** С I классом постоянства отмечены: *Adenophora coronopifolia* (15, 19, 20, 28 - 2); *Alectoria ochroleuca* (29); *Allium anisopodium* (7); *A. clathratum* (2, 9, 11, 28, 43, 44); *A. prostratum* (14 - 2, 22, 23 - 2, 24 - 2, 42, 44); *A. ramosum* (15); *A. rubens* (5, 11, 20, 26 - 2, 32 - 2); *A. strictum* (35); *A. tuvinicum* (38 - 2, 39 - 2); *A. ubsiculum* (1, 3); *A. vodopjanovae*

(4, 14, 28); *Androsace maxima* (7, 13); *A. septentrionalis* (5, 8, 15, 16, 22); *Arctogeron gramineum* (25 - 2, 32 - 3, 45 - 3); *Artemisia glauca* (6, 11, 19); *A. obtusiloba* (9 - 3, 15); *A. phaeolepis* (33 - 2, 34 - 2); *A. scoparia* (9); *A. tomentella* (7, 28 - 2); *Astragalus adsurgens* (2 - 2, 10, 22, 25, 29, 32); *A. laguroides* (3, 37, 41 - 2, 43); *A. species* (12, 13, 14, 42, 44); *Atraphaxis pungens* (28); *Caragana arborescens* (2 - 2); *Carex supina* (11, 15 - 5, 29 - 2, 30 - 5); *Cerastium arvense* (3 - 2, 8, 19); *Ceratocarpus arenarius* (6); *Chenopodium acuminatum* (7); *Clausia aprica* (10, 22, 35, 40); *Cleistogenes squarrosa* (11 - 2, 16 - 2, 24); *Convolvulus ammanii* (6, 9, 14 - 3); *Cotoneaster uniflorus* (8 - 2, 36 - 2); *Delphinium grandifloru* (18); *Dimorphostemum pectinatum* (45); *Dontostemon integrifolius* (32); *D. perennis* (16); *Dracocephalum fruticosum* (1 - 5, 5, 28, 32); *D. discolor* (6 - 2, 42 - 2, 44); *Eremogone meyeri* (7 - 2); *Erigeron acris* (12, 13 - 2); *Eritrichium jensense* (26 - 2); *Euphorbia discolor* (12, 13); *E. mongolica* (22); *Festuca lenensis* (40 - 3); *F. tschujensis* (38 - 3, 39 - 8); *Galatella angustissima* (3, 25, 28); *Galium coriaceum* (17 - 2, 18, 28); *Gentiana squarrosa* (15); *Gypsophila desertorum* (36, 43); *G. patrinii* (12 - 2, 26, 28, 42 - 3, 44 - 5); *Hedysarum chajrakanic* (28); *H. setigerum* (33, 34 - 5); *Helictotrichon schellianum* (33, 34, 38 - 2); *Hieracium umbellatum* (5 - 2); *Iris bloudowii* (27, 29); *I. ruthenica* (8); *Krascheninnikovia ceratoides* (6); *Lagochilus ilicifolius* (1); *Lappula redowskii* (15); *Larix sibirica* (8, 29, 34, 38, 39); *Leibnitzia anandria* (28); *Leonurus tataricus* (15); *Linum perenne* (6); *Lonicera microphylla* (36 - 2); *Lychnis sibirica* (33 - 3, 34 - 2); *Minuartia verna* (39, 45); *Oxytropis borissovae* (4 - 3); *Oxytropis eriocarpa* (33, 40); *Oxytropis macrosema* (34); *Oxytropis oligantha* (34); *Oxytropis squamulosa* (26 - 2); *Oxytropis strobilacea* (5, 20, 21, 29, 41); *Panzerina canescens* (6, 35, 43); *Panzerina lanata* (12 - 2); *Papaver nudicaule* (33 - 2, 34); *Patrinia sibirica* (38, 39); *Pedicularis myriophyll* (38); *Peucedanum vaginatum* (3, 15 - 3, 20, 38, 39); *Phleum phleoides* (30 - 2); *Phlomodoides tuberosa* (11, 13); *Potentilla longifolia* (19); *P. nudicaulis* (11, 35, 36); *P. tanacetifolia* (15); *Psathyrostachys juncea* (12 - 2, 13); *Rheum compactum* (2); *Rhododendron dauricum* (29 - 5); *Rhytidium rugosum* (11); *Saussurea salicifolia* (12, 14); *Saussurea schanginiana* (32); *Scabiosa ochroleuca* (11, 16); *Scorzonera austriaca* (20, 31, 43); *Serratula marginata* (3); *Sibbaldianthe adpressa* (5, 44, 45); *Silene repens* (22); *S. viscosa* (2); *Spiraea chamaedrifolia* (2 - 3, 7 - 3, 8, 20 - 7, 24 - 2, 29); *S. hypericifolia* (7 - 3, 9, 11 - 5, 19, 24); *Stellaria petraea* (38); *Stipa orientalis* (4 - 2, 7, 28); *S. pennata* (12, 22, 26); *Taraxacum sp.* (7, 45); *Teloxys aristata* (13, 14); *Thalictrum minus* (14, 35, 36, 44); *Thesium refractum* (10 - 2, 15, 45); *Th. repens* (29); *Tulipa uniflora* (20); *Veronica krylovii* (29); *V. pinnata* (5 - 2, 15, 37); *Vicia multicaulis* (20); *Vincetoxicum sibiricum* (22);

#### Локалитеты описаний:

| Номер в таблице | Номер в фитоценологе | Район           | Локалитет                   | Высота над ур.м., м | Ширина, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|----------------------|-----------------|-----------------------------|---------------------|----------------|-----------------|------------|---------------|
| 1               | 37376                | Овюрский        | окр с.Дус-Даг, 1км на ю-ю-в | 1464                | 50.74042       | 92.72399        | 20.08.2008 | Макунина Н.И. |
| 2               | 7051                 | Овюрский        | окр с.Дус-Даг               | 1896                | 50.97968       | 92.71288        | 05.08.2009 | Макунина Н.И. |
| 3               | 37381                | Овюрский        | окр с.Дус-Даг, 1км на ю-ю-в | 1710                | 50.73228       | 92.69506        | 20.08.2008 | Макунина Н.И. |
| 4               | 2532                 | Овюрский        | окр с.Хандыгайты            | 1595                | 50.75950       | 91.87020        | 25.06.2003 | Макунина Н.И. |
| 5               | 8858                 | Овюрский        | окр с.Хандагайты            | 1582                | 50.61695       | 91.53753        | 09.08.2021 | Макунина Н.И. |
| 6               | 5942                 | Эрзинский       | окр с.Цаган-Тологой         | 1436                | 50.01407       | 95.69130        | 21.07.2009 | Макунина Н.И. |
| 7               | 5988                 | Эрзинский       | окр с.Эрзин                 | 1248                | 50.15562       | 95.13136        | 28.07.2009 | Макунина Н.И. |
| 8               | 7685                 | Дзун-Хемчикский | окр с.Хондергей             | 1773                | 50.91021       | 91.75925        | 16.08.2014 | Макунина Н.И. |
| 9               | 7095                 | Дзун-Хемчикский | окр с.Хондергей             | 1032                | 51.13472       | 91.57677        | 10.08.2009 | Макунина Н.И. |
| 10              | 8308                 | Бай-Тайгинский  | окр оз.Кара-Холь            | 1552                | 51.34474       | 89.45057        | 10.07.2018 | Макунина Н.И. |
| 11              | 7099                 | Дзун-Хемчикский | окр с.Бажин-Алаак           | 1002                | 50.93957       | 91.75790        | 10.08.2009 | Макунина Н.И. |
| 12              | 37488                | Пий-Хемский     | окр с.Эрбек, 26 км на с-с-з | 1089                | 51.82607       | 94.05002        | 31.08.2008 | Макунина Н.И. |
| 13              | 37495                | Пий-Хемский     | окр с.Эрбек, 26 км на с-с-з | 1118                | 51.82724       | 94.05063        | 31.08.2008 | Макунина Н.И. |
| 14              | 37526                | Пий-Хемский     | окр с.Сесерлиг              | 1112                | 51.89310       | 94.23467        | 03.09.2008 | Макунина Н.И. |



| Номер в таблице | Номер в фитоценологе | Район           | Локалитет                               | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|----------------------|-----------------|---|---------------------|----------------|-----------------|------------|---------------|
| 15              | 8604                 | Бай-Тайгинский  | окр с.Тээли                             | 1281                | 51.14641       | 90.22183        | 13.08.2020 | Макунина Н.И. |
| 16              | 12478                | Дзун-Хемчикский | окр с.Чадан, 20км на с-в-в              | 1270                | 51.33350       | 91.90380        | 21.06.2002 | Макунина Н.И. |
| 17              | 12490                | Дзун-Хемчикский | окр с.Чадан, 20км на с-в-в              | 1310                | 51.32850       | 91.91070        | 21.06.2002 | Макунина Н.И. |
| 18              | 12492                | Дзун-Хемчикский | окр с.Чадан, 20км на с-в-в              | 1350                | 51.32920       | 91.91200        | 21.06.2002 | Макунина Н.И. |
| 19              | 12493                | Дзун-Хемчикский | окр с.Чадан, 20км на с-в-в              | 1360                | 51.32930       | 91.91300        | 21.06.2002 | Макунина Н.И. |
| 20              | 12495                | Дзун-Хемчикский | окр с.Чадан, 20км на с-в-в              | 1470                | 51.33100       | 91.91070        | 21.06.2002 | Макунина Н.И. |
| 21              | 12496                | Дзун-Хемчикский | окр с.Чадан, 20км на с-в-в              | 1460                | 51.33350       | 91.90380        | 21.06.2002 | Макунина Н.И. |
| 22              | 12526                | Дзун-Хемчикский | окр с.Шеми, 9км на ю-ю-з                | 1245                | 51.08780       | 91.29900        | 23.06.2002 | Макунина Н.И. |
| 23              | 12523                | Дзун-Хемчикский | окр с.Шеми, 9км на ю-ю-з                | 1245                | 51.08500       | 91.29820        | 23.06.2002 | Макунина Н.И. |
| 24              | 12525                | Дзун-Хемчикский | окр с.Шеми, 9км на ю-ю-з                | 1245                | 51.08470       | 91.29780        | 23.06.2002 | Макунина Н.И. |
| 25              | 12529                | Дзун-Хемчикский | окр с.Шеми, 9км на ю-ю-з                | 1270                | 51.08780       | 91.30120        | 23.06.2002 | Макунина Н.И. |
| 26              | 5164                 | Пий-Хемский     | окр с.Суш                               | 727                 | 52.00769       | 94.41729        | 09.08.2007 | Макунина Н.И. |
| 27              | 7692                 | Дзун-Хемчикский | окр с.Хондергей                         | 1633                | 50.89957       | 91.76605        | 17.08.2014 | Макунина Н.И. |
| 28              | 36579                | Улуг-Хемский    | окр г.Шагонар, 10км на с-в-В            | 780                 | 51.55080       | 93.01700        | 23.06.2006 | Макунина Н.И. |
| 29              | 36700                | Бай-Тайгинский  | окр оз.Кара-Холь                        | 1655                | 51.35070       | 89.43700        | 05.07.2006 | Макунина Н.И. |
| 30              | 8328                 | Бай-Тайгинский  | окр оз.Кара-Холь                        | 1707                | 51.29766       | 89.39787        | 11.07.2018 | Макунина Н.И. |
| 31              | 36589                | Овюрский        | окр с.Хандагайты, 22км на запад         | 1730                | 50.75170       | 91.85670        | 24.06.2006 | Макунина Н.И. |
| 32              | 8868                 | Овюрский        | окр с.Хандагайты, р.Улатай              | 1699                | 50.83114       | 92.27341        | 10.08.2021 | Макунина Н.И. |
| 33              | 36584                | Овюрский        | окр с.Хандагайты, 22км на запад         | 1835                | 50.74650       | 91.85530        | 24.06.2006 | Макунина Н.И. |
| 34              | 36581                | Овюрский        | окр с.Хандагайты, 22км на запад         | 1760                | 50.74800       | 91.85480        | 24.06.2006 | Макунина Н.И. |
| 35              | 37433                | Овюрский        | 15 км на север от моста через р.Улаатай | 1775                | 50.89952       | 92.28264        | 26.08.2008 | Макунина Н.И. |
| 36              | 37434                | Овюрский        | 15 км на север от моста через р.Улаатай | 1758                | 50.89829       | 92.20143        | 26.08.2008 | Макунина Н.И. |
| 37              | 37426                | Овюрский        | 15 км на север от моста через р.Улаатай | 1630                | 50.90040       | 92.27158        | 26.08.2008 | Макунина Н.И. |
| 38              | 7619                 | Овюрский        | окр с.Торгалык                          | 1791                | 50.85845       | 92.44035        | 06.08.2014 | Макунина Н.И. |
| 39              | 7627                 | Овюрский        | окр с.Торгалык                          | 1757                | 50.85546       | 92.44451        | 06.08.2014 | Макунина Н.И. |
| 40              | 7638                 | Овюрский        | окр с.Торгалык                          | 1929                | 50.87409       | 92.41512        | 08.08.2014 | Макунина Н.И. |
| 41              | 37418                | Овюрский        | окр с.Дус-Даг, 14км на с-з-з            | 1904                | 50.86819       | 92.41285        | 24.08.2008 | Макунина Н.И. |
| 42              | 37403                | Овюрский        | окр с.Дус-Даг, 14км на с-з-з            | 1700                | 50.82788       | 92.46328        | 23.08.2008 | Макунина Н.И. |
| 43              | 37402                | Овюрский        | окр с.Дус-Даг, 14км на с-з-з            | 1818                | 50.82298       | 92.44172        | 22.08.2008 | Макунина Н.И. |
| 44              | 37404                | Овюрский        | окр с.Дус-Даг, 14км на с-з-з            | 1736                | 50.84835       | 92.46414        | 23.08.2008 | Макунина Н.И. |
| 45              | 8855                 | Овюрский        | окр с.Саглы                             | 2000                | 50.48425       | 90.99979        | 09.08.2021 | Макунина Н.И. |

Ассоциация *Artemisio frigidae-Stipetum krylovii*,  
 субасс. *A. f.-S. k. festucetosum valesiacae* (1-20), *A. f.-S. k. convolvuletosum ammanii* (21-45)

Association *Artemisio frigidae-Stipetum krylovii*,  
 subass. *A. f.-S. k. festucetosum valesiacae* (1-20), *A. f.-S. k. convolvuletosum ammanii* (21-45)

| Номер в таблице   | 1  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14    | 15    | 16   | 17   | 18   | 19   | 20   | 21   | 22    | 23    | 24   | 25   | 26   | 27   | 28   | 29   | 30   | 31   | 32   | 33   | 34   | 35   | 36   | 37   | 38   | 39   | 40   | 41   | 42   | 43   | 44   | 45   | a    | b |    |    |    |   |
|---|--|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|--|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|----|----|----|---|
| Субассоциация   | <i>A. f.-S. k. festucetosum valesiacae</i> (a) |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      | <i>A. f.-S. k. convolvuletosum ammanii</i> (b) |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |    |    |    |   |
| Номер в фитоценологе                                    | 36682  | 5194 | 5977 | 5989 | 5994 | 5996 | 7009 | 7654 | 7655 | 8440 | 8655 | 8846 | 8847 | 35621 | 37438 | 8311 | 8319 | 8819 | 8820 | 8336 | 37484  | 37479 | 37482 | 7006 | 7007 | 5931 | 8645 | 8648 | 8651 | 8656 | 8657 | 8658 | 8659 | 8863 | 8865 | 8872 | 8942 | 8599 | 8663 | 8619 | 8630 | 8632 | 8682 | 8924 | 8939 |      |   |    |    |    |   |
| Высота, м над ур. м.                                    | 1470   | 1343 | 1195 | 1236 | 1162 | 1193 | 1191 | 1463 | 1461 | 1129 | 1214 | 2108 | 2024 | 1560  | 1665  | 1542 | 1550 | 942  | 1070 | 1251 | 829  | 826   | 834   | 1154 | 1159 | 960  | 1197 | 1203 | 1116 | 1199 | 1083 | 1034 | 940  | 1253 | 1270 | 1208 | 904  | 1157 | 855  | 771  | 711  | 8630 | 8632 | 772  | 1168 | 1022 |   |    |    |    |   |
| Экспозиция, °   | 120  | 60   |      | 310  | 290  | 30   |      |      | 250  | 80   | 290  | 120  |      |       | 230   | 200  | 130  |      | 30   | 40   |  | 250   |       |      | 210  | 140  |      |      |      |      |      |      |      |      |      |      | 320  |      |      | 30   | 60   | 130  | 130  |      | 120  |      |   |    |    |    |   |
| Крутизна, °   | 7  | 5    | 10   | 7    | 7    |      |      | 15   | 5    | 3    | 3    |      |      | 20    | 5     | 20   | 30   |      | 5    | 5    |  | 5     |       | 3    | 5    | 10   |      |      |      |      |      |      |      |      |      | 3    |      |      | 15   | 3    | 3    | 5    |      |      | 3    |      |   |    |    |    |   |
| ПП кустарников, %                                       | 10   | 15   | 5    | 5    |      | 15   |      |      | 40   | 40   | 7    |      |      | 20    | 5     | 20   | 30   |      |      |      |  | 5     |       | 3    | 5    |      |      |      |      |      | 15   |      |      |      |      |      | 10   |      | 15   | 15   |      | 15   | 30   |      | 10   |      |   |    |    |    |   |
| ПП травостоя, %   | 60   | 60   | 35   | 60   | 60   | 40   | 40   | 60   | 50   | 60   | 50   | 50   | 30   | 60    | 40    | 60   | 60   | 50   | 60   | 40   | 40   | 50    | 40    | 40   | 40   | 40   | 50   | 50   | 50   | 40   | 40   | 50   | 40   | 40   | 40   | 30   | 40   | 60   | 50   | 40   | 60   | 60   | 50   | 40   | 40   |      |   |    |    |    |   |
| Число видов   | 16   | 29   | 14   | 15   | 19   | 17   | 17   | 15   | 26   | 18   | 17   | 15   | 12   | 25    | 15    | 15   | 12   | 20   | 22   | 11   | 11   | 12    | 11    | 21   | 18   | 12   | 17   | 15   | 17   | 22   | 20   | 19   | 9    | 19   | 9    | 15   | 14   | 18   | 20   | 17   | 13   | 11   | 10   | 12   | 18   |      |   |    |    |    |   |
| Д.в. субасс. <i>A. f.-S. k. festucetosum valesiacae</i> |  |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |  |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |    |    |    |   |
| <i>Festuca valesiaca</i> (Cs)                           | 25   | 15   | 7    | 5    | .    | 3    | 10   | 7    | 2    | 3    | 3    | 15   | 7    | .     | 5     | 5    | 15   | 5    | 5    | 20   | .  | .     | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | . | .  | .  | V  | . |
| <i>Poa botryoides</i> (Cs)                              | .  | 3    | .    | .    | +    | .    | +    | 3    | 3    | 5    | +    | 15   | 7    | 5     | 5     | 20   | 10   | 10   | 10   | 10   | .  | .     | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | . | .  | .  | IV | + |
| <i>Veronica incana</i>                                  | 2  | .    | +    | 5    | 2    | +    | .    | +    | +    | .    | 3    | .    | .    | +     | 2     | .    | .    | +    | 2    | +    | .  | .     | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | . | .  | IV | .  |   |
| <i>Potentilla bifurca</i> (Cs)                          | +  | 2    | .    | +    | +    | .    | .    | .    | +    | +    | .    | +    | .    | .     | +     | +    | +    | +    | +    | 3    | .  | .     | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | . | .  | IV | +  |   |
| Д.в. субасс. <i>A. f.-S. k. convolvuletosum ammanii</i> |  |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |  |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |    |    |    |   |
| <i>Convolvulus ammanii</i>                              | .  | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .  | 8     | 5     | 2    | +    | +    | .    | .    | .    | .    | +    | 2    | 2    | .    | +    | +    | +    | +    | 3    | +    | .    | +    | +    | .    | .    | .    | . | IV | .  |    |   |
| <i>Cleistogenes squarrosa</i> (Cs)                      | .  | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .  | 2     | 2     | +    | +    | +    | 2    | +    | 2    | 3    | .    | 2    | +    | +    | +    | .    | +    | 3    | 5    | 3    | 3    | 5    | 10   | 5    | +    | 7    | . | V  | IV |    |   |
| <i>Kochia prostrata</i>                                 | .  | +    | 2    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .  | +     | .     | +    | 5    | 3    | +    | 5    | +    | 3    | .    | 3    | 3    | +    | 3    | 3    | 3    | 3    | +    | +    | +    | +    | +    | +    | +    | +    | + | +  | +  | V  | V |
| Д.в. класса <i>Cleistogenetea squarrosae</i>            |  |      |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |  |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |    |    |    |   |
| <i>Caragana pygmaea</i>                                 | 10   | +    | 3    | 2    | +    | 2    | +    | .    | 5    | 40   | 3    | .    | .    | 7     | .     | 20   | .    | 15   | 5    | .    | +  | 5     | +     | 2    | +    | +    | +    | +    | 3    | 15   | +    | +    | 3    | 7    | 5    | 20   | 10   | +    | 15   | .    | +    | .    | 30   | 3    | 10   | IV   | V |    |    |    |   |
| <i>Koeleria cristata</i>                                | 20   | 15   | .    | 3    | +    | 7    | 2    | 17   | 7    | 7    | 2    | 15   | 7    | 7     | 3     | .    | 2    | 15   | 15   | 10   | 2  | 2     | 2     | +    | +    | 2    | +    | 3    | 3    | 2    | .    | .    | .    | .    | 3    | 3    | .    | .    | .    | 7    | .    | 2    | .    | .    | +    | 3    | V | IV |    |    |   |
| <i>Agropyron cristatum</i>                              | 6  | 4    | .    | 2    | 6    | 2    | 2    | 4    | 10   | 19   | 2    | 2    | 2    | 19    | 2     | 7    | 6    | 6    | 2    | .    | .  | 6     | 4     | 2    | 2    | 2    | +    | 6    | 2    | 3    | 2    | 5    | 2    | 6    | 10   | 4    | 10   | 5    | 2    | 4    | +    | 14   | +    | 6    | 2    | V    | V |    |    |    |   |

| Номер в таблице                    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a   | b  |     |     |    |    |
|------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|-----|-----|----|----|
| <i>Stipa krylovii</i>              | 5  | 4  | 20 | 40 | 35 | 20 | 15 | +  | 3  | 20 | 15 | .  | .  | 10 | 5  | +  | 12 | 5  | 5  | +  | 10 | 7  | 15 | 10 | 7  | 8  | +  | 2  | 5  | 20 | 12 | 20 | 40 | 15 | 10 | 10 | 10 | 20 | 10 | 10 | 20 | 5  | 20 | 20 | 7  | V   | V  |     |     |    |    |
| <i>Potentilla acaulis</i>          | 7  | 7  | 3  | +  | 7  | 3  | 5  | 10 | 15 | 3  | 10 | 3  | 5  | 7  | 10 | 10 | 10 | 5  | 7  | 10 | 5  | 9  | 5  | 25 | 20 | 10 | 20 | 15 | 12 | 15 | +  | 7  | 2  | 3  | 20 | 5  | 3  | 3  | 5  | 10 | 20 | 20 | 15 | 3  | 3  | V   | V  |     |     |    |    |
| <i>Artemisia frigida</i>           | 5  | +  | 4  | 7  | 10 | 5  | 3  | 15 | 15 | +  | 10 | 5  | 5  | 12 | 3  | 2  | 7  | 5  | 7  | 28 | 10 | 20 | 10 | 10 | 15 | 12 | 20 | 15 | 12 | +  | 15 | 10 | 2  | 3  | 10 | 10 | 25 | 20 | 20 | 40 | 20 | 30 | 10 | 15 | 20 | V   | V  |     |     |    |    |
| <i>Orostachys spinosa</i>          | .  | +  | +  | 5  | +  | +  | .  | .  | 2  | 2  | 10 | 2  | 3  | +  | .  | .  | +  | .  | +  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | IV  | I   |    |    |
| <i>Ephedra monosperma</i>          | .  | +  | +  | .  | +  | +  | +  | +  | 3  | .  | 2  | 3  | 2  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | 10 | 7  | .  | 2  | +  | +  | .  | +  | .  | .  | .  | .  | .  | 2  | +  | .  | .  | .  | .  | +  | III | II |     |     |    |    |
| <i>Goniolimon speciosum</i>        | .  | +  | .  | .  | .  | +  | +  | +  | +  | +  | .  | .  | .  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II | I   |     |    |    |
| <i>Heteropappus altaicus</i>       | .  | 3  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | +  | .  | +  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II | IV  |     |    |    |
| <i>Carex duriuscula</i>            | 15 | +  | 3  | +  | 2  | +  | +  | 10 | +  | .  | 2  | +  | .  | 5  | 7  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | 3  | IV  | II  |    |    |
| <i>Caragana bungei</i>             | .  | 15 | 5  | 5  | +  | 15 | +  | +  | 30 | .  | 4  | .  | .  | 12 | 5  | .  | .  | +  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | IV  | I   |    |    |
| Прочие виды                        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |    |     |     |    |    |
| <i>Xanthopaemelia camschadalis</i> | 2  | .  | 5  | 2  | 2  | 3  | +  | 3  | .  | .  | .  | 10 | 10 | 5  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | .   | III | II |    |
| <i>Bupleurum bicaule</i>           | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | +  | +  | +  | +  | .  | .  | +  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | .   | .   | II | .  |
| <i>Veronica pinnata</i>            | .  | 4  | .  | .  | .  | .  | +  | .  | .  | +  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | .   | II  | II |    |
| <i>Dianthus versicolor</i>         | +  | .  | .  | .  | 2  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | +  | .  | .  | .  | +  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | .   | II  | II |    |
| <i>Achnatherum sibiricum</i>       | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | 2  | .  | 4  | 6  | 2  | 6  | .  | .  | .  | .  | .  | .  | 4  | 4  | .  | 2  | .  | 2  | .  | 2   | +  | III |     |    |    |
| <i>Erysimum flavum</i>             | .  | .  | .  | .  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | .   | +   | +  | II |
| <i>Artemisia obtusiloba</i>        | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | 5  | 5  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | .   | I   | II |    |
| <i>Alyssum obovatum</i>            | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .  | .   | .   | +  | II |

**Примечание.** С I классом постоянства отмечены: *Allium anisopodium* (4, 10, 18- 2, 19- 2, 24, 25, 30, 34, 39 ); *A. austrosibiricum* (2, 9, 26, 38, 45- 2); *A. clathratum* (4- 2, 26 ); *A. mongolicum* (27, 29- 2, 30- 2, 40- 2); *A. ramosum* (2, 24, 30- 2, 40- 3); *A. rubens* (40- 3); *A. tuvinicum* (9, 18 ); *A. vodopjanovae* (2, 37 ); *Amaranthus retroflexus* (27 ); *Ancathia igniaria* (21, 27, 31, 41 ); *Androsace dasyphylla* (14 ); *A. septentrionalis* (12, 19 ); *Arctogeron gramineum* (38 ); *Artemisia commutata* (14 ); *A. glauca* (2- 3, 19- 3); *A. palustris* (5- 3, 6, 38- 5, 40- 2); *A. pycnorhiza* (12 ); *A. santolinifolia* (9- 2); *A. scoparia* (40, 41, 42 ); *Aster alpinus* (1- 2, 2- 2, 14 ); *Astragalus adsurgens* (1- 3, 14, 17- 2); *A. dilutus* (36, 37- 2, 38- 2); *A. macroceras* (36 ); *A. multicaulis* (12 ); *A. stenoceras* (27, 28, 31- 2, 32 ); *A. testiculatus* (13 ); *Berberis sibirica* (14 ); *Bupleurum scorzoniferifolium* (2- 2); *Carex pediformis* (18 ); *C. supina* (2, 17- 3, 26- 2); *Ceratocarpus arenarius* (24, 25 ); *Chamaerhodos erecta* (38, 40 ); *Chenopodium acuminatum* (3, 7, 24, 25 ); *Coluria geoides* (19 ); *Convolvulus chinensis* (31 ); *Cymbaria daurica* (29- 7, 30- 2, 31, 32- 2); *Dontostemon perennis* (33, 34 ); *Dracocephalum fruticulosum* (9- 2, 14- 2); *Elytrigia geniculata* (16 ); *Erodium cicutarium* (40 ); *Euphorbia tshuiensis* (15 ); *Galatella angustissima* (18, 19 ); *Galium verum* (20 ); *Gypsophila desertorum* (22- 2, 37, 38 ); *Iris bloudowii* (19 ); *I. potaninii* (11 ); *Kitagawia baicalensis* (2, 14 ); *Krascheninnikovia ceratoides* (2, 14, 39 ); *Lappula marginata* (3, 6, 7, 24- 2, 25 ); *Leymus dasystachys* (2- 2, 10, 24 ); *Nanophyton grubovii* (29 ); *Oxytropis borissovae* (36 ); *O. intermedia* (17, 18 ); *Panzerina lanata* (9, 10, 16, 36, 40 ); *Peucedanum vaginatum* (15 ); *Phlomis tuberosa* (19 ); *Polygala sibirica* (45 ); *Potentilla multifida* (1, 10 ); *P. nudicaulis* (8 ); *Psathyrostachys juncea* (21- 2); *Pulsatilla turczaninowii* (5, 45 ); *Saussurea pricei* (9 ); *Schizonepeta annua* (38 ); *S. multifida* (16 ); *Scorzonera austriaca* (2, 9, 10 ); *S. ikonnikovii* (27, 31, 34, 36 ); *Silene repens* (30 ); *S. viscosa* (25 ); *Sisymbrium polymorphum* (18 ); *Spiraea hypericifolia* (9 ); *Stellaria dichotoma* (5, 9, 22, 29, 31, 34 ); *Taraxacum sp.* (31, 39 ); *Teloxys aristata* (33, 40, 44 ); *Thesium refractum* (14)

**Локалитеты описаний:**

| Номер в таблице | Номер в фитоценоотеке | Район             | Локалитет                               | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|-----------------------|-------------------|---|---------------------|----------------|-----------------|------------|---------------|
| 1               | 36682                 | Бай-Тайгинский    | окр оз.Кара-Холь                        | 1470                | 51.35830       | 89.45870        | 04.07.2006 | Макунина Н.И. |
| 2               | 5194                  | Барун-Хемчикский  | окр г.Ак-Довурак                        | 1343                | 51.29451       | 90.28520        | 12.08.2007 | Макунина Н.И. |
| 3               | 5977                  | Эрзинский         | окр с.Эрзин                             | 1195                | 50.12279       | 95.12386        | 27.07.2009 | Макунина Н.И. |
| 4               | 5989                  | Эрзинский         | окр с.Эрзин                             | 1236                | 50.15612       | 95.13106        | 28.07.2009 | Макунина Н.И. |
| 5               | 5994                  | Эрзинский         | окр с.Эрзин                             | 1162                | 50.12315       | 95.15608        | 29.07.2009 | Макунина Н.И. |
| 6               | 5996                  | Эрзинский         | окр с.Эрзин                             | 1193                | 50.11607       | 95.14580        | 29.07.2009 | Макунина Н.И. |
| 7               | 7009                  | Эрзинский         | окр с.Эрзин                             | 1191                | 50.11200       | 95.09866        | 31.07.2009 | Макунина Н.И. |
| 8               | 7654                  | Овюрский          | р.Улаатай                               | 1463                | 50.86387       | 92.25135        | 11.08.2014 | Макунина Н.И. |
| 9               | 7655                  | Овюрский          | р.Улаатай                               | 1461                | 50.85341       | 92.24924        | 12.08.2014 | Макунина Н.И. |
| 10              | 8440                  | Барун-Хемчикский  | р.Ак-Суг                                | 1129                | 51.41482       | 90.39293        | 05.07.2019 | Макунина Н.И. |
| 11              | 8655                  | Эрзинский         | окр оз.Торе-Холь, пески Цугэр-Элс       | 1214                | 50.15893       | 95.12412        | 18.08.2020 | Макунина Н.И. |
| 12              | 8846                  | Монгун-Тайгинский | окр с.Мугур-Аксы                        | 2108                | 50.43164       | 90.04401        | 08.08.2021 | Макунина Н.И. |
| 13              | 8847                  | Монгун-Тайгинский | окр с.Мугур-Аксы                        | 2024                | 50.42583       | 90.13743        | 08.08.2021 | Макунина Н.И. |
| 14              | 35621                 | Овюрский          | окр с.Хандыгайты, 30км на запад         | 1560                | 50.61950       | 91.54230        | 02.07.2005 | Макунина Н.И. |
| 15              | 37438                 | Овюрский          | 15 км на север от моста через р.Улаатай | 1665                | 50.89874       | 92.27576        | 26.08.2008 | Макунина Н.И. |
| 16              | 8311                  | Бай-Тайгинский    | окр оз.Кара-Холь                        | 1542                | 51.34399       | 89.44905        | 10.07.2018 | Макунина Н.И. |
| 17              | 8319                  | Бай-Тайгинский    | окр оз.Кара-Холь                        | 1550                | 51.31170       | 89.42747        | 11.07.2018 | Макунина Н.И. |
| 18              | 8819                  | Чеди-Хольский     | окр с.Как                               | 942                 | 51.37699       | 93.76439        | 05.08.2021 | Макунина Н.И. |
| 19              | 8820                  | Чеди-Хольский     | окр с.Как                               | 1070                | 51.38112       | 93.70554        | 05.08.2021 | Макунина Н.И. |
| 20              | 8336                  | Бай-Тайгинский    | окр с.Кара-Холь                         | 1251                | 51.29977       | 89.84528        | 13.07.2018 | Макунина Н.И. |
| 21              | 37484                 | Пий-Хемский       | окр с.Сесерлиг, 14 км на юг             | 829                 | 51.74876       | 94.26982        | 30.08.2008 | Макунина Н.И. |
| 22              | 37479                 | Пий-Хемский       | окр с.Сесерлиг, 14 км на юг             | 826                 | 51.74987       | 94.26579        | 30.08.2008 | Макунина Н.И. |
| 23              | 37482                 | Пий-Хемский       | окр с.Сесерлиг, 14 км на юг             | 834                 | 51.78105       | 94.26534        | 30.08.2008 | Макунина Н.И. |
| 24              | 7006                  | Эрзинский         | окр с.Эрзин                             | 1154                | 50.10326       | 95.10204        | 30.07.2009 | Макунина Н.И. |
| 25              | 7007                  | Эрзинский         | окр с.Эрзин                             | 1159                | 50.10982       | 95.07457        | 31.07.2009 | Макунина Н.И. |
| 26              | 5931                  | Кызылский         | окр с.Черби                             | 960                 | 51.83581       | 94.61017        | 19.07.2009 | Макунина Н.И. |
| 27              | 8645                  | Тес-Хемский       | окр с.Берт-Даг                          | 1197                | 50.62379       | 94.81546        | 17.08.2020 | Макунина Н.И. |
| 28              | 8648                  | Тес-Хемский       | окр с.Берт-Даг                          | 1203                | 50.62106       | 94.83249        | 17.08.2020 | Макунина Н.И. |
| 29              | 8651                  | Тес-Хемский       | окр с.Белдир-Арыг                       | 1116                | 50.54303       | 94.89469        | 17.08.2020 | Макунина Н.И. |
| 30              | 8656                  | Эрзинский         | окр оз.Торе-Холь, пески Цугэр-Элс       | 1199                | 50.18219       | 95.12390        | 18.08.2020 | Макунина Н.И. |

| Номер в таблице | Номер в фитоценологе | Район           | Локалитет                    | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|----------------------|-----------------|------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 31              | 8657                 | Тес-Хемский     | окр с.Самагалтай             | 1083                | 50.56369       | 94.83405        | 18.08.2020 | Макунина Н.И. |
| 32              | 8658                 | Тес-Хемский     | окр с.Самагалтай             | 1034                | 50.53810       | 94.78987        | 18.08.2020 | Макунина Н.И. |
| 33              | 8659                 | Тес-Хемский     | окр оз.Шара-Нур, Чоогей      | 940                 | 50.21334       | 94.65287        | 18.08.2020 | Макунина Н.И. |
| 34              | 8863                 | Овюрский        | окр с.Чаа-Сур                | 1253                | 50.77883       | 92.75722        | 10.08.2021 | Макунина Н.И. |
| 35              | 8865                 | Овюрский        | окр с.Чаа-Сур                | 1270                | 50.79773       | 92.75864        | 10.08.2021 | Макунина Н.И. |
| 36              | 8872                 | Овюрский        | окр с.Хандагайты             | 1208                | 50.75543       | 92.12363        | 11.08.2021 | Макунина Н.И. |
| 37              | 8942                 | Чаа-Хольский    | окр с.Чаа-Холь               | 904                 | 51.58908       | 92.16674        | 19.08.2021 | Макунина Н.И. |
| 38              | 8599                 | Бай-Тайгинский  | окр с.Тээли, сопочный массив | 1157                | 51.13896       | 90.24752        | 13.08.2020 | Макунина Н.И. |
| 39              | 8663                 | Пий-Хемский     | окр г.Кызыл                  | 855                 | 50.24028       | 95.15673        | 19.08.2020 | Макунина Н.И. |
| 40              | 8619                 | Дзун-Хемчикский | окр г.Чадан                  | 771                 | 51.37137       | 91.32359        | 14.08.2020 | Макунина Н.И. |
| 41              | 8630                 | Улуг-Хемский    | окр с.Арыг-Узю               | 711                 | 51.44997       | 92.63624        | 14.08.2020 | Макунина Н.И. |
| 42              | 8632                 | Улуг-Хемский    | окр с.Хайыракан              | 588                 | 51.56278       | 93.05408        | 15.08.2020 | Макунина Н.И. |
| 43              | 8682                 | Тандинский      | окр оз.Хадын                 | 772                 | 51.39449       | 94.51444        | 20.08.2020 | Макунина Н.И. |
| 44              | 8924                 | Эрзинский       | Урочище                      | 1168                | 50.15476       | 94.99586        | 17.08.2021 | Макунина Н.И. |
| 45              | 8939                 | Чаа-Хольский    | окр с.Шанчи                  | 1022                | 51.69587       | 91.98598        | 19.08.2021 | Макунина Н.И. |

Таблица 7

Ассоциации *Nanophyto grubovii–Stipetum krylovii* (1-25), *Lagochilo ilicifolii–Stipetum glareosae* (26-35), *Elytrigio geniculatae–Stipetum orientalis* (36-45)

Table 7

Associations *Nanophyto grubovii–Stipetum krylovii* (1-25), *Lagochilo ilicifolii–Stipetum glareosae* (26-35), *Elytrigio geniculatae–Stipetum orientalis* (36-45)

| Номер в таблице  | 1   | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13    | 14    | 15   | 16   | 17   | 18   | 19   | 20    | 21   | 22   | 23   | 24   | 25   | 26   | 27    | 28   | 29   | 30   | 31   | 32   | 33    | 34    | 35    | 36    | 37   | 38   | 39   | 40   | 41   | 42   | 43   | 44   | 45   | a   | b   | c  |     |     |   |
|--|---|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|-------|------|------|------|------|------|--|-------|------|------|------|--|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-----|-----|----|-----|-----|---|
| Ассоциация   | <i>Nanophyto grubovii–Stipetum krylovii</i> (a) |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |       |      |      |      |      |      | <i>Lagochilo ilicifolii–Stipetum glareosae</i> (b) |       |      |      |      | <i>Elytrigio geniculatae–Stipetum orientalis</i> (c) |      |       |       |       |       |      |      |      |      |      |      |      |      |      |     |     |    |     |     |   |
| Номер в фитоценологе                                     | 8709  | 8715 | 8707 | 8716 | 8717 | 8721 | 8722 | 8718 | 5154 | 5158 | 5161 | 5152 | 37474 | 37483 | 5157 | 8706 | 8720 | 8710 | 8713 | 36570 | 8874 | 8903 | 8946 | 8951 | 8957 | 37443  | 37439 | 8871 | 8873 | 7047 | 8870   | 8878 | 37461 | 37454 | 37465 | 37446 | 5183 | 5192 | 5925 | 8249 | 8265 | 8335 | 8438 | 8439 | 8598 |     |     |    |     |     |   |
| Высота, м над ур. м.                                     | 827   | 712  | 714  | 703  | 725  | 721  | 687  | 658  | 731  | 828  | 687  | 674  | 778   | 830   | 832  | 702  | 657  | 813  | 686  | 650   | 1148 | 995  | 716  | 599  | 634  | 1386   | 1338  | 1216 | 1174 | 1099 | 1230   | 1221 | 1139  | 1140  | 1157  | 1444  | 1118 | 987  | 968  | 1266 | 1373 | 1440 | 1010 | 1079 | 1092 |     |     |    |     |     |   |
| Экспозиция, °  | 270   | 360  | 220  | 250  | 90   | 190  | 240  | 90   | 70   | 230  | 20   | 30   | 50    | 180   | 190  | 210  | 50   | 140  |      | 220   | 330  |      |      |      | 310  |  | 180   |      | 310  | 80   | 200  | 20   | 270   | 170   | 310   | 120   | 160  | 260  | 150  | 170  | 270  | 200  | 90   | 320  | 300  |     |     |    |     |     |   |
| Крутизна, °  | 20  | 5    | 15   | 15   | 15   | 7    | 3    | 3    | 27   | 7    | 5    | 10   | 15    | 5     | 20   | 5    | 12   | 20   |      | 5     | 3    |      |      |      | 5    |  | 3     |      | 7    | 12   | 5  | 3    | 10    | 7     | 20    | 30    | 12   | 15   | 30   | 10   | 25   | 25   | 7    | 7    | 20   |     |     |    |     |     |   |
| ПП кустарников, %  |   | 20   |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |       |      |      |      |      |      |  |       |      |      |      |  |      |       |       |       | 5     | 5    | 20   |      | 20   | 15   | 30   | 40   |      | 10   |     |     |    |     |     |   |
| ПП травостоя, %  | 50  | 40   | 50   | 30   | 40   | 30   | 40   | 40   | 45   | 50   | 50   | 45   | 50    | 40    | 40   | 50   | 50   | 40   | 60   | 15    | 40   | 35   | 40   | 40   | 60   | 35   | 40    | 30   | 30   | 35   | 30   | 40   | 35    | 35    | 40    | 45    | 35   | 50   | 40   | 40   | 40   | 30   | 60   | 40   | 40   |     |     |    |     |     |   |
| Число видов  | 22  | 28   | 17   | 20   | 24   | 18   | 27   | 23   | 19   | 19   | 13   | 16   | 14    | 14    | 12   | 16   | 22   | 12   | 22   | 13    | 9    | 19   | 10   | 10   | 16   | 18   | 9     | 20   | 12   | 12   | 16   | 18   | 10    | 14    | 22    | 17    | 20   | 26   | 24   | 17   | 29   | 18   | 15   | 18   | 28   |     |     |    |     |     |   |
| Д.в. асс. <i>Nanophyto grubovii–Stipetum krylovii</i>    |   |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |       |      |      |      |      |      |  |       |      |      |      |  |      |       |       |       |       |      |      |      |      |      |      |      |      |      |     |     |    |     |     |   |
| <i>Nanophyton grubovii</i> (Sgg)                         | 5   | 10   | 5    | 35   | 15   | 20   | 20   | 30   | 5    | 3    | 50   | 30   | 40    | 30    | 30   | 5    | 10   | 12   | 55   | 5     | 30   | 20   | 20   | 30   | 15   | .  | 3     | .    | 3    | .    | 2  | 5    | 5     | 7     | .     | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .   | .   | .  | V   | III | . |
| Д.в. асс. <i>Lagochilo ilicifolii–Stipetum glareosae</i> |   |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |       |      |      |      |      |      |  |       |      |      |      |  |      |       |       |       |       |      |      |      |      |      |      |      |      |      |     |     |    |     |     |   |
| <i>Stipa glareosa</i> (Sgg)                              | 10  | 5    | 3    | +    | 7    | +    | 3    | +    | .    | 2    | .    | +    | .     | .     | 2    | .    | .    | .    | 7    | .     | +    | .    | .    | .    | .    | 15   | 5     | +    | +    | 2    | +  | +    | 2     | 2     | +     | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .   | III | V  | .   |     |   |
| <i>Asterothamnus heteropappoides</i>                     | .   | +    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .     | .    | .    | .    | .    | .    | .  | 8     | 2    | 5    | 3    | .  | 5    | +     | .     | .     | 5     | .    | .    | .    | .    | .    | .    | .    | .    | .    | +   | +   | +  | IV  | I   | . |
| <i>Oxytropis borissovae</i>                              | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .     | .    | .    | .    | .    | .    | .  | +     | .    | +    | +    | .  | +    | .     | .     | +     | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .   | .   | .  | III | .   | . |
| <i>Lagochilus ilicifolius</i>                            | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .     | .    | .    | .    | .    | .    | .  | +     | .    | 2    | .    | +  | 2    | .     | 2     | +     | 3     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .   | .   | .  | IV  | .   | . |
| <i>Potentilla astragalifolia</i> (Sgg)                   | .   | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .     | .    | .    | .    | .    | .    | .  | 2     | .    | 2    | .    | +  | +    | +     | 2     | +     | 2     | +    | .    | .    | .    | .    | .    | .    | .    | .    | .   | .   | .  | IV  | +   | . |
| Д.в. класса <i>Stipetea glareosae-gobicae</i>            |   |      |      |      |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |       |      |      |      |      |      |  |       |      |      |      |  |      |       |       |       |       |      |      |      |      |      |      |      |      |      |     |     |    |     |     |   |
| <i>Convolvulus ammannii</i>                              | +   | +    | 5    | +    | +    | .    | +    | .    | 2    | +    | .    | .    | .     | .     | +    | 2    | +    | .    | .    | .     | .    | .    | +    | .    | .    | 2  | 2     | 2    | +    | +    | +  | +    | .     | .     | 2     | .     | +    | +    | 2    | .    | .    | .    | .    | +    | .    | III | IV  | II |     |     |   |
| <i>Gypsophila desertorum</i>                             | .   | +    | .    | +    | 2    | .    | .    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .     | +    | +    | .    | .    | .    | .  | +     | .    | +    | +    | .  | .    | .     | .     | .     | .     | .    | +    | +    | .    | 3    | +    | .    | +    | .    | +   | I   | II | III |     |   |
| <i>Scorzonera ikonnikovii</i>                            | .   | 2    | .    | .    | +    | .    | +    | .    | .    | .    | .    | .    | .     | .     | .    | .    | .    | .    | .    | .     | .    | .    | .    | .    | .    | .  | .     | .    | .    | .    | .  | .    | .     | .     | .     | .     | .    | +    | +    | .    | .    | .    | .    | .    | .    | .   | .   | II | +   | I   |   |
| <i>Krascheninnikovia ceratoides</i>                      | 3   | .    | 5    | .    | .    | .    | .    | .    | 3    | .    | .    | .    | .     | +     | 2    | 2    | .    | 7    | .    | .     | .    | .    | .    | .    | .    | .  | .     | .    | .    | .    | .  | .    | .     | .     | .     | .     | 2    | .    | .    | .    | .    | .    | 2    | .    | .    | II  | +   | I  |     |     |   |

| Номер в таблице  | 1  | 2  | 3  | 4 | 5 | 6 | 7  | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a   | b   | c   |    |     |     |    |     |    |
|--|----|----|----|---|---|---|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|----|-----|-----|----|-----|----|
| <i>Ajania fruticulosa</i>  | +  | +  | 10 | . | + | 5 | 10 | 3 | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | II  | .  | .   |     |    |     |    |
| <i>Neopallasia pectinata</i>   | .  | .  | .  | . | . | . | +  | . | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | .  | .  | 10 | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | I  | +   | .   |    |     |    |
| <i>Ancathia igniaria</i>   | .  | +  | .  | . | . | + | .  | + | .  | +  | +  | +  | .  | +  | .  | .  | .  | .  | +  | .  | +  | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | II | .   | .   |    |     |    |
| <i>Psathyrostachys juncea</i>  | .  | 5  | 2  | + | + | + | +  | 7 | +  | .  | 2  | 2  | 2  | +  | 2  | +  | .  | 3  | 10 | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | 2  | .  | .  | .  | .  | .  | 3  | .  | .   | IV  | +   | I  |     |     |    |     |    |
| Д.в. асс. <i>Elytrigio geniculatae–Stipetum orientalis</i>                       |    |    |    |   |   |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |    |     |     |    |     |    |
| <i>Elytrigia geniculata (So)</i>   | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 7  | +  | +  | 5  | .  | .   | 5   | .   | .  | +   | .   | .  | III |    |
| <i>Stipa orientalis (So)</i>   | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | 18 | 15 | +  | 5  | 10 | 3  | +  | 5   | +   | 8   | .  | +   | V   |    |     |    |
| <i>Achnatherum sibiricum (So)</i>  | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 10 | .  | 14 | .  | 2  | .   | 2   | 6   | .  | 6   | .   | .  | III |    |
| <i>Dracocephalum fruticosum (So)</i>   | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 3  | +  | 4  | 2  | .  | .   | 5   | 5   | +  | 2   | 5   | .  | I   | IV |
| <i>Atraphaxis pungens</i>  | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .   | II  |    |     |    |
| <i>Polygala tenuifolia (So)</i>  | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | +  | +  | .  | .   | .   | .   | +  | .   | .   | II |     |    |
| Д.в. класса <i>Cleistogenetea squarrosae</i> и <i>Stipetea glareosae-gobicae</i> |    |    |    |   |   |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |    |     |     |    |     |    |
| <i>Caragana pygmaea</i>  | 2  | 20 | +  | 3 | . | 5 | 5  | . | 2  | +  | .  | +  | +  | +  | +  | 2  | 10 | 3  | .  | 2  | .  | +  | +  | .  | .  | 2  | 10 | 10 | 10 | 2  | 5  | .  | 5  | 5  | 5  | 8  | 5  | 20 | 5  | 15 | 3  | 20 | 4  | +  | 10 | IV  | V   | V   |    |     |     |    |     |    |
| <i>Agropyron cristatum</i>   | 6  | 2  | 19 | 2 | 2 | 2 | .  | 2 | 4  | 10 | 4  | 4  | 4  | 2  | 4  | 2  | .  | 14 | 2  | 4  | .  | 8  | 4  | 2  | 10 | .  | .  | 2  | 2  | .  | .  | 2  | 2  | 6  | 4  | 3  | 6  | 3  | 4  | 2  | 6  | 10 | 7  | 28 | 3  | V   | III | V   |    |     |     |    |     |    |
| <i>Artemisia frigida</i>   | 15 | 10 | 20 | + | 7 | 5 | 5  | 5 | 30 | 30 | +  | 15 | 2  | .  | 20 | 30 | 12 | 15 | 7  | 2  | +  | +  | 15 | +  | 5  | 4  | 2  | 3  | 5  | 2  | 10 | 15 | 10 | 7  | 8  | 5  | 3  | 2  | 16 | 7  | 5  | 10 | 15 | 3  | 2  | V   | V   | V   |    |     |     |    |     |    |
| <i>Goniolimon speciosum</i>  | .  | +  | +  | . | + | . | +  | + | .  | +  | .  | +  | +  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | III | III | II |     |    |
| <i>Kochia prostrata</i>  | .  | +  | +  | . | . | . | .  | . | 2  | 3  | .  | .  | +  | +  | 2  | 2  | +  | 2  | +  | 2  | +  | .  | +  | .  | .  | +  | 3  | 3  | .  | 2  | +  | 10 | .  | +  | 2  | .  | .  | .  | .  | 2  | +  | .  | +  | .  | .  | III | IV  | II  |    |     |     |    |     |    |
| Д.в. класса <i>Cleistogenetea squarrosae</i>                                     |    |    |    |   |   |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |    |     |     |    |     |    |
| <i>Stipa krylovii</i>  | .  | 5  | +  | + | 3 | + | +  | . | +  | 2  | 2  | 2  | 2  | 2  | .  | 15 | 15 | +  | .  | .  | +  | 2  | 5  | +  | +  | 8  | 15 | 10 | 15 | 30 | 15 | 7  | 8  | 3  | 3  | +  | 2  | 20 | .  | 5  | 8  | .  | 20 | 8  | .  | IV  | V   | IV  |    |     |     |    |     |    |
| <i>Cleistogenes squarrosa</i>  | +  | +  | +  | + | . | . | +  | 2 | .  | .  | .  | .  | .  | +  | .  | +  | +  | .  | +  | .  | .  | 4  | 3  | +  | 2  | .  | .  | .  | .  | +  | .  | .  | .  | 2  | .  | .  | 2  | .  | +  | +  | .  | .  | +  | .  | 2  | III | I   | III |    |     |     |    |     |    |
| <i>Potentilla acaulis</i>  | 5  | 5  | +  | . | . | . | 2  | + | 7  | 5  | 2  | +  | +  | .  | .  | 3  | 12 | .  | 2  | +  | .  | .  | +  | .  | .  | .  | .  | 5  | 7  | +  | .  | .  | .  | .  | +  | .  | 2  | 3  | 2  | 5  | 2  | 3  | 3  | 5  | 2  | III | II  | V   |    |     |     |    |     |    |
| <i>Koeleria cristata</i>   | .  | +  | .  | . | 2 | . | +  | . | 2  | .  | 2  | 5  | 2  | 2  | .  | .  | 7  | .  | +  | .  | .  | .  | .  | .  | 20 | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 5  | +  | .  | .  | .  | .  | 2  | +  | .  | 2  | 2   | III | I   | II |     |     |    |     |    |
| <i>Heteropappus altaicus</i>   | +  | +  | .  | + | + | + | +  | + | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | +  | +  | 5  | +  | .  | +  | +  | .  | 2  | +  | .  | .  | +  | .  | .  | .  | +  | +  | .  | .  | .  | .  | III | III | II  |    |     |     |    |     |    |
| <i>Poa botryoides</i>  | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | 10 | .   | I   | II |     |    |
| <i>Erysimum flavum</i>   | +  | +  | .  | . | + | + | +  | . | +  | +  | .  | .  | .  | +  | .  | +  | +  | +  | +  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | III | I  | II  |     |    |     |    |
| <i>Teloxys aristata</i>  | .  | .  | .  | + | + | + | +  | + | .  | +  | .  | +  | 2  | .  | .  | .  | .  | +  | .  | .  | 3  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | II  | II | +   |     |    |     |    |
| <i>Allium anisopodium</i>  | .  | 2  | .  | + | + | . | +  | + | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | II  | .   | I  |     |     |    |     |    |
| <i>Veronica pinnata</i>  | .  | +  | .  | . | . | . | .  | . | +  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | 2   | II  | .  | I   |     |    |     |    |
| <i>Alyssum obovatum</i>  | +  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | +   | .  | II  |     |    |     |    |
| <i>Chamaerhodos erecta</i>   | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | II  |     |    |     |    |
| <i>Orostachys spinosa</i>  | .  | .  | .  | . | . | . | .  | . | .  | +  | .  | +  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | I   | .   | II |     |    |
| Прочие виды  | .  | .  | .  | . | . | . | .  | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .  | .   | .   |    |     |    |

| Номер в таблице                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | a | b  | c  |     |    |    |   |    |
|---------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|-----|----|----|---|----|
| <i>Ephedra monosperma</i>       | . | + | + | . | + | . | + | . | + | +  | .  | .  | .  | .  | .  | 2  | +  | +  | .  | +  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | 5  | 2  | .  | .  | +  | . | II | +  | III |    |    |   |    |
| <i>Astragalus stenoceras</i>    | . | + | . | 3 | 3 | . | + | + | + | +  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | II | .  | .   |    |    |   |    |
| <i>Artemisia scoparia</i>       | . | + | . | + | + | . | + | 3 | . | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | II | .  | .   |    |    |   |    |
| <i>Artemisia obtusiloba</i>     | . | . | 3 | . | . | . | . | . | . | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | +  | .  | +  | .  | .  | 20 | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | .  | .  | .  | .  | .  | .  | .  | . | II | .  | +   |    |    |   |    |
| <i>Astragalus macroceras</i>    | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | +  | 2  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | II | .  |     |    |    |   |    |
| <i>Kitagawia baicalensis</i>    | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | .  | II | .   |    |    |   |    |
| <i>Saussurea pricei</i>         | . | . | . | . | . | . | . | . | + | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | 2 | +  | +  | II  |    |    |   |    |
| <i>Astragalus multicaulis</i>   | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2  | +  | .  | .  | .  | +  | .  | . | .  | .  | II  |    |    |   |    |
| <i>Euphorbia tshuiensis</i>     | + | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | +  | .  | +  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | +  | I  | +   | II |    |   |    |
| <i>Pulsatilla turczaninowii</i> | . | . | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | .  | .  | +   | .  | II |   |    |
| <i>Dianthus versicolor</i>      | . | + | . | . | . | . | . | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | . | .  | .  | +   | +  | +  | + | II |

Примечание. С I классом постоянства отмечены: *Allium austrosibiricum* (39 -2); *A. delicatulum* (12, 39); *A. mongolicum* (21 -2); *A. prostratum* (27 -2); *A. ramosum* (7 -5, 14, 17 -2, 45); *A. senescens* (14 -5, 41, 42); *A. vodopjanovae* (28, 30 4); *Alyssum lenense* (1, 8, 39); *A. turkestanicum* (11); *Amblynotus rupestris* (10); *Androsace maxima* (11, 39); *Arctogeron gramineum* (44, 45 -3); *Artemisia anethifolia* (19); *A. caespitosa* (10, 12, 13); *A. macrocephala* (19); *A. palustris* (8, 22, 24); *A. pycnorhiza* (41 -7); *A. santolinifolia* (42 -5); *A. sieversiana* (8, 19); *A. tomentella* (20); *Astragalus dilutus* (5, 13 -2, 45); *A. laguroides* (28, 31); *A. monophyllus* (6, 7); *A. species* (26, 44); *A.testiculatus* (16, 25); *Bupleurum bicaule* (10, 26, 35 -2, 41); *Caragana bungei* (1, 12, 15, 20, 32 -2, 40 -5, 41 -5); *Carex duriuscula* (25 -3, 32 -3); *C. pediformis* (41); *Ceratocarpus arenarius* (8 -2); *Chenopodium acuminatum* (6); *Clausia aprica* (4, 36); *Clematis latisecta* (1 -3, 2 -2, 4, 8); *Crepis tectorum* (4); *Dontostemon micranthus* (10, 11, 12, 15, 38); *Dontostemon perennis* (22); *Echinops humilis* (37, 38); *Galium coriaceum* (38); *Galium verum* (39); *Gueldenstaedtia monophylla* (45); *Gypsophila patrini* (39, 45 -3); *Helictotrichon altaicum* (1 -3, 9, 10); *Iris potaninii* (5, 6, 7, 9, 28 -2, 44); *Linaria debilis* (1); *Orobanche coerulescens* (6); *Oxytropis species* (17); *Panzerina lanata* (3, 5, 18, 29, 36 -2, 42); *Potentilla bifurca* (1 0, 7, 19, 32); *P. longifolia* (22); *P. nudicaulis* (14); *P. soongarica* (2, 7); *Salsola tragus* (4); *Schizonepeta annua* (6, 36); *Scutellaria tuvensis* (39); *Selaginella sanguinolenta* (38 -2, 45 -2); *Setaria viridis* (6 -2); *Silene graminifolia* (39); *Stellaria dichotoma* (22, 35, 38); *S. petraea* (41); *Stevenia cheiranthoides* (1, 41); *Taraxacum officinale* (4, 7, 8, 17); *Thalictrum foetidum* (1, 38); *Tribulus terrestris* (5); *Tulipa uniflora* (8, 39); *Vicia costata* (5, 37, 38); *Vincetoxicum sibiricum* (39); *Xanthopaemelia camschadalis* (8 0, 19 -5, 22, 25 -20); *Youngia tenuifolia* (17)

#### Локалитеты описаний:

| Номер в таблице | Номер в фитоценологе | Район     | Локалитет   | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|----------------------|-----------|-------------|---------------------|----------------|-----------------|------------|---------------|
| 1               | 8709                 | Кызылский | окр г.Кызыл | 827                 | 51.76327       | 94.40769        | 23.08.2020 | Макунина Н.И. |
| 2               | 8715                 | Кызылский | окр г.Кызыл | 712                 | 51.68684       | 94.27812        | 23.08.2020 | Макунина Н.И. |
| 3               | 8707                 | Кызылский | окр г.Кызыл | 714                 | 51.75302       | 94.39649        | 23.08.2020 | Макунина Н.И. |
| 4               | 8716                 | Кызылский | окр г.Кызыл | 703                 | 51.68655       | 94.27748        | 23.08.2020 | Макунина Н.И. |
| 5               | 8717                 | Кызылский | окр г.Кызыл | 725                 | 51.68900       | 94.27418        | 23.08.2020 | Макунина Н.И. |
| 6               | 8721                 | Кызылский | окр г.Кызыл | 721                 | 51.67268       | 94.23330        | 23.08.2020 | Макунина Н.И. |
| 7               | 8722                 | Кызылский | окр г.Кызыл | 687                 | 51.66840       | 94.22324        | 23.08.2020 | Макунина Н.И. |



| Номер в таблице | Номер в фитоцентеке | Район            | Локалитет                              | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|---------------------|------------------|--|---------------------|----------------|-----------------|------------|---------------|
| 8               | 8718                | Кызылский        | окр г.Кызыл                            | 658                 | 51.68881       | 94.26317        | 23.08.2020 | Макунина Н.И. |
| 9               | 5154                | Пий-Хемский      | окр с.Сесерлиг                         | 731                 | 51.87030       | 94.41703        | 08.08.2007 | Макунина Н.И. |
| 10              | 5158                | Пий-Хемский      | окр с.Сесерлиг                         | 828                 | 51.86433       | 94.41788        | 08.08.2007 | Макунина Н.И. |
| 11              | 5161                | Пий-Хемский      | окр с.Сесерлиг                         | 687                 | 51.86945       | 94.42127        | 08.08.2007 | Макунина Н.И. |
| 12              | 5152                | Пий-Хемский      | окр с.Сесерлиг                         | 674                 | 51.87199       | 94.41709        | 08.08.2007 | Макунина Н.И. |
| 13              | 37474               | Пий-Хемский      | окр с.Сесерлиг, 14 км на юг            | 778                 | 51.73399       | 94.28565        | 30.08.2008 | Макунина Н.И. |
| 14              | 37483               | Пий-Хемский      | окр с.Сесерлиг, 14 км на юг            | 830                 | 51.74836       | 94.25656        | 30.08.2008 | Макунина Н.И. |
| 15              | 5157                | Пий-Хемский      | окр с.Сесерлиг                         | 832                 | 51.86465       | 94.41749        | 08.08.2007 | Макунина Н.И. |
| 16              | 8706                | Кызылский        | окр г.Кызыл                            | 702                 | 51.75276       | 94.39608        | 23.08.2020 | Макунина Н.И. |
| 17              | 8720                | Кызылский        | окр г.Кызыл                            | 657                 | 51.67352       | 94.24613        | 23.08.2020 | Макунина Н.И. |
| 18              | 8710                | Кызылский        | окр г.Кызыл                            | 813                 | 51.76309       | 94.40652        | 23.08.2020 | Макунина Н.И. |
| 19              | 8713                | Кызылский        | окр г.Кызыл                            | 686                 | 51.70388       | 94.31056        | 23.08.2020 | Макунина Н.И. |
| 20              | 36570               | Кызылский        | окр с.Сук-Пак                          | 650                 | 51.60950       | 94.23170        | 22.06.2006 | Макунина Н.И. |
| 21              | 8874                | Овюрский         | окр с.Хандагайты                       | 1148                | 50.73258       | 92.09905        | 11.08.2021 | Макунина Н.И. |
| 22              | 8903                | Тес-Хемский      | окр с.Холь-Оожу                        | 995                 | 50.66157       | 94.42749        | 16.08.2021 | Макунина Н.И. |
| 23              | 8946                | Чаа-Хольский     | окр с.Чаа-Холь                         | 716                 | 51.56432       | 92.24833        | 19.08.2021 | Макунина Н.И. |
| 24              | 8951                | Чаа-Хольский     | окр с.Чаа-Холь                         | 599                 | 51.56718       | 92.33936        | 19.08.2021 | Макунина Н.И. |
| 25              | 8957                | Кызылский        | окр с.Усть-Элегест                     | 634                 | 51.55358       | 93.78929        | 19.08.2021 | Макунина Н.И. |
| 26              | 37443               | Овюрский         | 5 км на с-с-з от моста через р.Улаатай | 1386                | 50.79792       | 92.20261        | 27.08.2008 | Макунина Н.И. |
| 27              | 37439               | Овюрский         | 5 км на с-с-з от моста через р.Улаатай | 1338                | 50.79523       | 92.20753        | 27.08.2008 | Макунина Н.И. |
| 28              | 8871                | Овюрский         | окр с.Хандагайты, Р.Мугур              | 1216                | 50.76149       | 92.13242        | 11.08.2021 | Макунина Н.И. |
| 29              | 8873                | Овюрский         | окр с.Хандагайты                       | 1174                | 50.74850       | 92.11355        | 11.08.2021 | Макунина Н.И. |
| 30              | 7047                | Овюрский         | окр с.Ак-Чира                          | 1099                | 50.75065       | 93.15857        | 04.08.2009 | Макунина Н.И. |
| 31              | 8870                | Овюрский         | окр с.Хандагайты, р.Мугур              | 1230                | 50.76765       | 92.13891        | 11.08.2021 | Макунина Н.И. |
| 32              | 8878                | Овюрский         | окр с.Хандагайты                       | 1221                | 50.74612       | 92.01372        | 11.08.2021 | Макунина Н.И. |
| 33              | 37461               | Овюрский         | окр с.Хандагайты, 4 км на восток       | 1139                | 50.71871       | 92.15042        | 28.08.2008 | Макунина Н.И. |
| 34              | 37454               | Овюрский         | окр с.Хандагайты, 4 км на восток       | 1140                | 50.72068       | 92.14998        | 28.08.2008 | Макунина Н.И. |
| 35              | 37465               | Овюрский         | окр с.Хандагайты, 4 км на восток       | 1157                | 50.72035       | 92.14679        | 28.08.2008 | Макунина Н.И. |
| 36              | 37446               | Овюрский         | 5 км на с-с-з от моста через р.Улаатай | 1444                | 50.79727       | 92.19772        | 27.08.2008 | Макунина Н.И. |
| 37              | 5183                | Барун-Хемчикский | окр г.Ак-Довурак                       | 1118                | 51.33874       | 90.57916        | 11.08.2007 | Макунина Н.И. |
| 38              | 5192                | Барун-Хемчикский | окр г.Ак-Довурак                       | 987                 | 51.33399       | 90.55667        | 11.08.2007 | Макунина Н.И. |
| 39              | 5925                | Кызылский        | окр с.Черби                            | 968                 | 51.83605       | 94.62012        | 19.07.2009 | Макунина Н.И. |
| 40              | 8249                | Тес-Хемский      | окр с.Берт-Даг                         | 1266                | 50.64832       | 94.80100        | 28.06.2018 | Макунина Н.И. |
| 41              | 8265                | Тес-Хемский      | окр с.Холь-Оожу                        | 1373                | 50.77526       | 94.37909        | 01.07.2018 | Макунина Н.И. |

| Номер в таблице | Номер в фитоценоотеке | Район            | Локалитет                    | Высота над ур.м., м | Широта, ° с.ш. | Долгота, ° в.д. | Дата       | Автор         |
|-----------------|-----------------------|------------------|------------------------------|---------------------|----------------|-----------------|------------|---------------|
| 42              | 8335                  | Бай-Тайгинский   | окр с.Кара-Холь              | 1440                | 51.25926       | 89.70671        | 13.07.2018 | Макунина Н.И. |
| 43              | 8438                  | Барун-Хемчикский | окр г.Ак-Довурак             | 1010                | 51.32385       | 90.53951        | 05.07.2019 | Макунина Н.И. |
| 44              | 8439                  | Барун-Хемчикский | окр г.Ак-Довурак             | 1079                | 51.37877       | 90.44505        | 05.07.2019 | Макунина Н.И. |
| 45              | 8598                  | Бай-Тайгинский   | окр с.Тээли, сопочный массив | 1092                | 51.12404       | 90.26333        | 13.08.2020 | Макунина Н.И. |