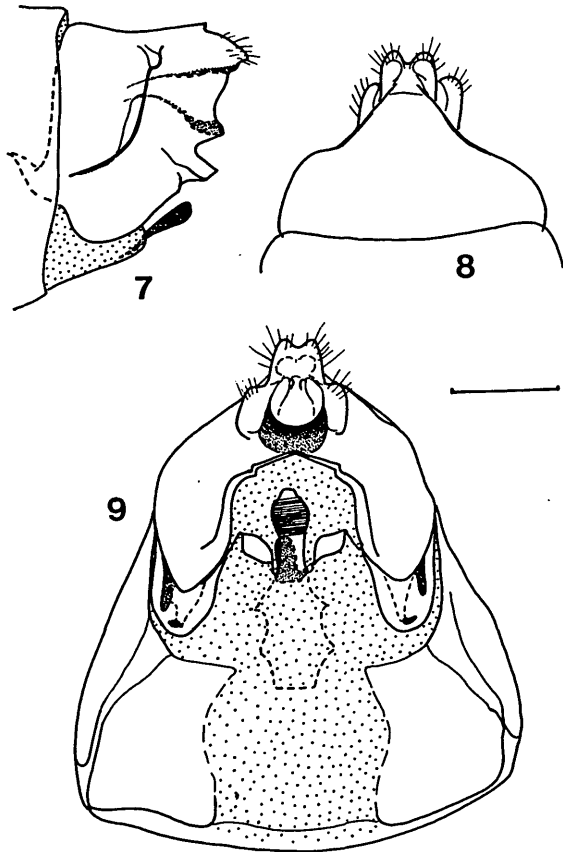


*A.maritima* are wide, inferior appendages are shorter than in *A.ulmeri* with ovoid (not elongated as in the last species) gonostyle, and the aedeagal structures resembles that of *A.majuscula* in the shape of the apex. Eversible lateral lobes of aedeagus in *A.ulmeri* are longer and have no basal spines. Parameres in *A.maritima* are obtuse apically and much longer than in *A.ulmeri*.



## ACKNOWLEDGEMENTS

We express our thanks to L.A.Zhiltsova and L.Nadezhkina for the sampling of material and making it accessible to us.

## REFERENCES

- Gall,W.K., Wiggins,G.B. 1992, Phylogenetic studies in the Limnephiloidea (Trichoptera). Abstr.7th Int.Symp.Trich.,Umea,Sweden:10.
- Ivanov,V.D. 1991, New caddisflies from the mountainous regions of Soviet Central Asia (Trichoptera). - Opusc.zool.flumin. 63:1-13.
- Schmid,F. 1953-54, Contribution à l'étude de la sous-famille des Apataniinae (Trichoptera, Limnophilidae). I (1953) Tijd.Ent. 96:109-167. - II (1954) do.97:1-74.

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## Legend to the figures.

- Figs. 1-6. Male genitalia of *Apatania maritima* sp.n., holotype:  
 Fig.1. Lateral view with protruded phallic structures.  
 Fig.2. Dorsal view, phallic structures omitted.  
 Fig.3. Apical part of the left external branch of segment 9, posterior view.  
 Fig.4. Aedeagus and parameres, dorsal view, parameres are shifted to show the aedeagus.  
 Fig.5. Aedeagus and parameres, lateral view.  
 Fig.6. Tip of aedeagus, dorsolateral view.  
 Scale: Figs.1-3 and 6: 0,3mm; 4 and 5: 0,5mm  
 Figs. 7-9. Female genitalia of *Apatania maritima* sp.n., allotype:  
 Fig.7. Lateral view.  
 Fig.8. Dorsal view.  
 Fig.9. Ventral view.  
 Scale: 0,3 mm.



*Apatania sarkandensis* has long gonostylii, long acute preanal appendages, narrowed basal and apical parts of the large dorsal appendages (external branches of segment 9), and differs in the shape of segment 9 bearing the setose lateroposterior lobes. Eversible processes and spines on aedeagus are absent.

The species described here should be placed in the fimbriata-complex of the genus and represents a transition between mongolica- and malaisei-subgroups proposed by Schmid (1953). The subgroup malaisei is distinctly paraphyletic, as was supposed by Schmid (l.c.). *A.ulmeri* and related *A.maritima* and *A.sarkandensis* should be separated from the rest of malaisei-subgroup. Thus, we treat here the newly described species as a member of the ulmeri-subgroup in the subgenus *Apatelia* Wall. distinguished from others in long straight slender parameres, very long and strongly curved downward dorsal 'arms' - external branches of segment 9 in the male, and short anal tube and ventral part of the last abdominal segment in the female. The ulmeri-subgroup in related to *A.mongolica* Mart. and, probably, *A.sinensis* Mart.

## LIST OF RESEARCH WORKERS ON TRICHOPTERA

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 Present interests: development of larvae of *Hydropsyche* under the influence of several nitrite and nitrate concentrations. egg development, swarming behaviour of *Hydropsyche*; identification of Trichoptera. - Other interests: larval behaviour, net-building of caddis larvae, distribution of *Hydropsyche* in Europe. - Wanted: papers on problems mentioned above, e-mail-addresses of scientists who are working with net-spinning caddis; alcohol material of larvae of *Hydropsyche* from western Europe.

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