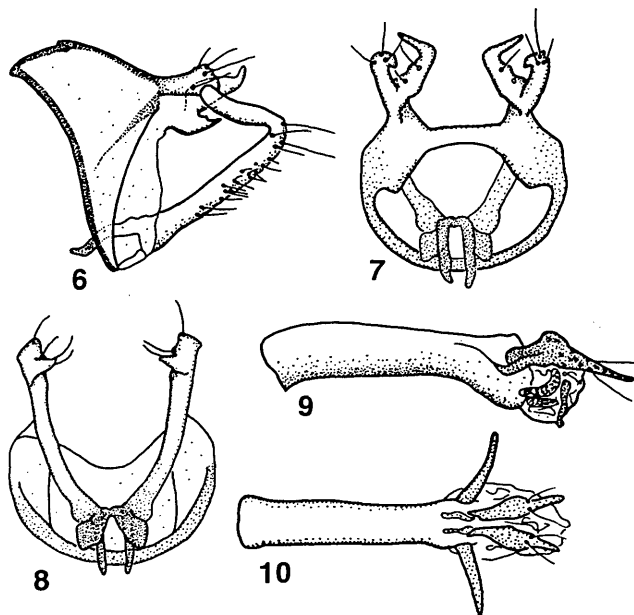


Fig.1-5: *Helicopsyche giboni* sp.n.(male): 1..Maxillary palp lateral, 2..right fore and hind wings, 3..region of media and cubitus, magnified, 4..basal part of hind wing costa, magnified, 5..abdominal 6th sternite lateral.



Figs.6-10: *Helicopsyche giboni* sp.n.(male): 6..Genitalia lateral, 7..dorsal, 8..ventral, 9..phallus lateral, 10..phallus dorsal.

substraight and rounded, with a mesad oriented, trianguloid, pointed process near apex (Figs.6,8). Gonocoxite, dorsal and ventral view (Figs.7,8) slightly diverging. Basal plate with a dorsal pair of parallel processes running antieriad and a ventral pair of subtrianguloid diverging processes (Figs.7,8). 10th tergum divides into a pair of well separated, bifurcated sub-branches (Fig.6). Dorsal sub-branch about twice the length of the superior appendage; in dorsal view posteromesad oriented and medially strongly bent laterad forming a right angle; pointed and with two laterally oriented setae on basal part (Fig.7); in lateral view distally slightly curved dorsad (Fig.6). Ventral sub-branch in lateral view short and with a rounded ventral and toothed dorsal margin (Fig.6). Phallus (Figs.9,10) substraight in lateral view and with two pairs of sclerotized processes which are large, arrow-shaped, laterally with small microtrichia and a dorsal pair of long setae.

Phylogenetic relationships. Johanson & Willassen (in press) concluded that the African *Helicopsyche* formed a monophyletic group, and that the Seychellean and East African species probably were sister groups. *H.giboni* sp.n. belongs to the East Africa-Seychelles species group based on the following synapomorphies: Anterior wing M2 reduced. Anterior wing without fork 5. Posterior wing Cul undivided. Genitalic 9th pleurite without

longitudinal apodeme. Genitalia with superior appendage originating dorsolaterally on segment 9. The following synapomorphies are shared with the Seychellean *H.palpalis* Ulmer 1910 and *H.kantilali* Marlier & Malicky 1979: Eye ommatrichia well developed. Anterior wing R5 reduced. Anterior wing apically ellipsoid. Posterior wing without fork 1. Abdominal reticulation absent. Only flattened laterally sited postantennal warts and presence of a phallus with sclerotized processes covered by microtrichia indicate a closer relationship between *H.giboni* sp.n. and the East African *Helicopsyche*. Thus, present available evidence indicates that *H.giboni* sp.n. forms a monophyletic group together with the Seychellean *Helicopsyche*. This group again is the sister group to the East African *Helicopsyche*.

A second species is known to exist in Madagascar (Gibon, pers.comm.). Examination of this species shows that it differs from *H.giboni* sp.n. in several wing and genitalic characters. The species will probably be described by J.Oláh.

Only males are known of *H.giboni* sp.n. The discovery of the female and larva will probably give further valuable information in the understanding of the history of the Madagascar *Helicopsyche* fauna.

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References

Johanson, K.A., 1993, New *Helicopsyche* von Siebold 1856 (Trichoptera: Helicopsychidae) from East Africa. - *Annls.Limnol.* 29:139-155.

Johanson, K.A., 1995, A catalog of the Helicopsychidae (Insecta: Trichoptera) of the world. - *Bull.Zoöl.Mus. Univ.Amsterdam* 14:101-124.

Johanson, K.A., Willassen, E. (in press), Are the African species of *Helicopsyche* von Siebold (Insecta: Trichoptera: Helicopsychidae) monophyletic? - *Trop.Zool.*

Marlier, G., Malicky, H., 1979, A new *Helicopsyche* from the Seychelles (Trichoptera, Helicopsychidae). - *Z.Arbgem.Öst.Ent.* 30:110-112.

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RUSSIAN LITERATURE

Засыпкина И.А., Рябухин А.С.,
Макаренко Е.А., Макаренко М.А.,
1996. Обзор амфибиотических насе-
комых Северо-Востока Азии.
Препринт. Магадан: СВНЦ ДВО РАН,
116 с.

Zasyapkina, I.A., Ryabukhin, A.S., Makarchenko, E.A.,
Makarchenko, M.A. 1996
Review of amphibiotic insects of North-East Asia.
Preprint, Magadan: NESF FAB RAS, 116 pp.

Results of investigations of amphibiotic insects in Northeast Asia in the years 1905-1995 are presented. A checklist of insects include 688 species in 9 orders, 59 families and 257 genera. Data of the distribution in Russian Far East, Siberia and adjacent regions are given in this book. The variability of some forms is analyzed. Distribution maps of the orders and of some Diptera families are given. The reference list includes 233 publications. (Autoreferat)

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