
RUSSIAN *PTERONARCYS* UNDER STUDY

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Many years ago, Dr. I. M. Levanidova, the grand old lady of the aquatic entomologists in the Biology and Pedology Institute of the Academy of Sciences at Vladivostok, invited me to visit and work with her team. Unfortunately, only in June 1998 had I an opportunity to follow this kind invitation. I was very warmly received by Dr Levanidova and her group; although Dr Levanidova is long retired she continues working on Trichoptera and maintains an active contact with her fellow limno-entomologists. A few days were spent in the laboratories at Vladivostok with study of already available collections and in preparation of intended field work. The colleagues at Vladivostok had excellently prepared the trip; tents, mattresses and all necessary camping equipment, collecting

gear, ethanol – you name it, they had it! We travelled with a vehicle resembling a small army truck; it was not the fastest possible, but very good for the purpose. Valeri, our driver, took us safely along well paved roads, gravel roads, logging tracks and across all kinds of rough terrain, between Vladivostok and Khabárovsk. We spent 17 very pleasant days in the field, camping in the wild, cooking meals on campfires; supplies were obtained in village shops and often directly from the farmers. I was very impressed with what I saw of the life of the local people. One could also virtually see the causal connection between lack of conveniences in every day life (especially running tap water) and clean rivers: there is no wastewater.

We found our way to many streams thanks to Dr Michail Tiunov, a bat expert, who was our scout and field guide and knew to match maps (actually rather good) and reality; he also helped us collecting. At stream sites, Valeri serviced the truck, while the rest of us rushed to collect. Dr Valentina Teslenko and cand. Tatiana Arefina were beating the vegetation with nets, for stoneflies and caddisflies, respectively. Micha's wife, Dr Tatiana Tiunova, collected mature mayfly larvae and handled them very cautiously, because the larvae then travelled with us in field rearing equipment, until they made it to the adult stage. I have to admit that I myself was not mainly after Plecoptera, but collected net-winged midges (Diptera: Blephariceridae); the Far East Russian fauna includes some very interesting taxa of doubtful affinities of which I wanted (and obtained!) good fresh material for morphological study and phylogenetic analysis.

Of course, I also collected some Plecoptera. I was mainly fascinated by large numbers of both *Pteronarcys reticulata* and *P. sachalina* in mixed mating associations or evening swarms over the rivers, and was wondering how so many large larvae of two sibling species can coexist, what their development and life-cycles may be, etc. Therefore, whenever possible I made random collections of larvae and exuviae for size class analyses, and pinched 10 egg masses from

ovipositing females, 2 of *sachalina*, the other of *reticulata*. From then on, we travelled with both a mayfly and a stonefly Kindergarten; the stoneflies survived to Schlitz. There are now data on temperature data of egg development, on increment of larvae at moults, and time spent in particular instars. The largest larvae in my breeding trays are now in instar 9 and well over 20 mm long.

Dr Teslenko and myself will merge our data on the animals and will meet at Schlitz in April/May, to work on Russian *Pteronarcys* life cycles and to produce a joint paper on the subject.

In Search of Rare *Allocapnia*
(Capniidae)

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Of the forty-one eastern North American species of the winter stonefly genus *Allocapnia*, numerous species are rather geographically widespread in distribution (Ross and Ricker 1971). Adults of this genus can often be collected abundantly from riparian vegetation by beating or searching trees, and from bridges (Ross and Ricker 1971, Poulton and Stewart 1991). However, there are several non-Ozark species that are considered geographically restricted and rare. Between February 21-26, 1999, we attempted to recollect *A. brooksi* Ross 1964, *A. cunninghami* Ross and Ricker

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