

ABOUT SOME SYSTEMATIC AND NOMENCLATORIC PROBLEMS WITHIN THE SUBGENUS *PHOLEOIXODES* (IXODIDAE)

The subgenus *Pholeoixodes* has been erected by SCHULZE (Zschr. Morphol. Ökol. Tiere 38: 630—658, 1942) with *Ixodes hexagonus* Leach, 1815 as its type species. This taxon is recognized by most of the contemporary ixodologists. The ticks belonging to this subgenus represent until today a very serious problem for the systematics because many of the European species, especially those described by Schulze, are defined so poorly that their identification is hardly possible. I would like to touch on two points.

One of the problems is the systematic position of the ticks from foxes and badgers excluding *I. hexagonus* Leach. SCHULZE recognized four species from central Europe: *Ixodes melicola* P. Sch. et Schl., 1929, *I. vulpinus* P. Sch., 1937, *I. vulpicola* P. Sch., 1937 (= *I. autumnalis vulpis* Pagenst., 1861 in P. Sch. and Schl., 1929) and *I. latirostris* P. Sch., 1937 (= *I. crenulatus* Koch, 1841 in P. Sch. and Schl., 1929). The number of specimens which served for the original description was very limited. Recently BABOS (Die Zeckenfauna Mitteleuropas: 1—410, 1964) made an attempt to clarify the situation but—in my opinion—with rather problematic results. He added to the complex of Schulze's species further two new species: *I. bakonyensis* and *I. danyi*, and two new subspecies: *I. hexagonus hungaricus* and *I. vulpis hungaricus*. I cannot agree with his (and also Schulze's) viewpoint that both foxes and badgers have their specific ticks. Under natural conditions the burrows can be visited or inhabited during the year by different individuals of both species of these carnivores which are responsible for a genetically mixed population of ticks composed of specimens from the burrows and from the animals which mate together. Considering this feature of the biology of the hosts I do not see any reason for the origin of strongly specialized tick species.

But another question is how many species do form in fact this complex of parasites of foxes and badgers. I express my doubts about the validity

of some of the above mentioned species. The variability of morphological characters of these ticks is very great and this fact was not considered sufficiently in the work of BABOS (1964). When examining our material I found e.g. such differences in the form and size of the spiracular plate of specimens collected from the same host that they could be hardly determined as belonging to the same species when using the key of BABOS. Some features e.g. the form of the sentum did not correspond with any of the specific characteristics so that another new taxon could be created. Such procedure would be incorrect.

Another problem is the identity of the so called *I. crenulatus* Koch, 1841. NUTTALL and WARBURTON (Ticks. A monograph of the Ixodoidea, part II: 1—348, 1911) consider it as a synonym of *I. hexagonus*. SCHULZE and SCHLÖTTKE (Sitzsber. u. Abh. naturforsch. Ges. Rostock III, F. 2: 95—112, 1929) first identified the ticks from a badger as *I. crenulatus* but later SCHULZE (Zschr. f. Parasitenk. 9: 351—372, 1937) accepted the synonymy with *I. hexagonus* and created for the badger ticks a new name *I. latirostris*. There exists a very rich literature dealing with *I. crenulatus* from the territory of the Soviet Union. It is clear that under this name various authors report different species including *I. hexagonus*. Marmots are recorded as important hosts of *I. crenulatus* in the Soviet literature. Considering the ecological peculiarities of the marmots we can accept the viewpoint that these rodents might have their specific tick parasite. ČERNÝ (Zool. zhurn. 40: 184—188, 1961) called it *I. filippovae*. If we accept that the original diagnosis of *I. crenulatus* (described from a badger) is insufficient for the identification with any of the known species, it would be desirable to put this name onto the international list of nomina rejecta.

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