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NEW DATA ON THE DISTRIBUTION AND HOSTS OF LARVAE OF *ERYTHRAEIDAE* (*ACARI*, *ACTINEDIDA*) IN POLAND*

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NOWE DANE O ROZMIESZCZENIU I ŻYWICIELACH LARW ROZTOCZY Z RODZINY *ERYTHRAEIDAE* (*ACARI*, *ACTINEDIDA*) W POLSCE

Abstract. The new data on distribution in Poland and hosts of *Charletonia singularis* (Oudemans), *Leptus phalangii* (De Geer) and *L. mariae* Haitlinger larvae are given. *Ch. singularis* was collected from the new localities without hosts, *L. phalangii* was collected from the new localities on *Mitopus morio* (Fabr.) and *Oligolophus tridens* (C. L. Koch) (*Opilionida*), and *L. mariae* was collected from the new locality on *Phyllobius urticae* (De Geer) (*Coleoptera*). *O. tridens* and *Ph. urticae* are recognized as the hosts of *Erythraeidae* larvae for the first time.

Up to now, 33 species of mites of *Erythraeidae* Robineau-Desvoidy, 1828 have been found in Poland. Twelve of them are known from postlarval forms (nymphs and adults) and the remaining 21 from heteromorphic larvae which parasitize arthropods. Because the distribution, life cycle, hosts and food spectra of most of the species remain unknown it seems advisable to report on any data which refer to these problems. This will allow to improve our knowledge of this interesting mite family on the days to come, and, if joined with rearing of separate species it may help to suppress the so-called "dual systematics" which exists separately for larvae and postlarval forms (Gabryś 1988).

During my studies on postlarval forms of *Erythraeidae* in Poland (the mites were collected directly, with a sieve or extracted in Tullgren apparatus) and after the examination of the material collected by my friends-entomologists (who used the insect sweep net) I got several interesting news about the hosts and distribution of three species: *Charletonia singularis* (Oudemans, 1910), *Leptus phalangii* (De Geer, 1778) (= *Achorolophus ignotus* Oudemans, 1903) and *Leptus mariae* Haitlinger, 1987.

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Charletonia singularis (Oudemans, 1910)

Hitherto it was reported from four provinces in Poland: Białystok, Gdańsk, Piła and Wrocław from *Mustela erminea* L. (*Carnivora, Mustelidae*), a chance host and from *Phyllotreta undulata* Kutschera (*Coleoptera, Chrysomelidae*) and undetermined *Homoptera* (Haitlinger 1987, Gabryś 1988). I have found three individuals not connected with the hosts in Central Poland. (1) 3 June 1988, 2 km outside Sieradz in the direction of Zduńska Wola (Sieradz province); murshy meadow on Warta river, the burnt turf; collected directly. (2) 4 June 1988, mixed forest east of Łódź, between Lipiny and Wiączyń (Łódź province); turf in a wet ditch at the forest edge; moss and litter; extracted in Tullgren apparatus. (3) 4 June 1988, between Lipiny and Natolin (Łódź province); visited and pastured grass-land at „Wiączyń" forest; collected directly.

The finding of *Ch. singularis* larvae in Central Poland confirms the wide range of distribution of this species. An interesting fact is also the finding of *Sphaerolophus cardinalis* (C. L. Koch, 1837) nymphs in these same samples: loc. (1) – 3 individuals, loc. (2) – 2 ind., loc. (3) – 3 ind. While the larvae were filled with food – what corresponds with finding them already without their hosts – nymphs, on the contrary, were starving which appeared in relatively smaller body dimensions and the very dense opisthosomal setation. The observations described above indirectly confirm the Treat's (1980) suggestion about the synonymy of *Ch. singularis* (the larva) and *S. cardinalis* (the nymph and the adult). It may also be presumed that under our climate conditions the metamorphosis of this species falls on the turn of May and that the tritonymph occurring between the deutonymph and adult is ephemeral.

Leptus phalangii (De Geer, 1778) (= _Achorolophus ignotus_ Oudemans, 1903)

Hitherto it was reported from the following provinces in Poland: Bielsko - Biała, Gdańsk, Koszalin, Krosno, Olsztyn, Suwałki, Toruń, Wałbrzych and Wrocław from *Haematopota pluvialis* (L.) (*Diptera, Tabanidae*), undetermined *Aphididae* (*Homoptera*), *Phalangium opilio* L., *Rilaena* [= *Platybunus*] *triangularis* (Herbst), *Lophopilio* [= *Odiellus*] *palpinalis* (Herbst) and other undetermined *Opilionida* and *Clethrionomys glareolus* (Schreb.) (*Rodentia, Arvicolidae*) as the chance host (Haitlinger 1987, Gabryś 1988). The four individuals connected with the host were found in Northern Poland. (1) 19 Sept. 1987, Wolin National Park (Szczecin province); beech forest on the cliff; moss under rot stump; collected directly; leg. G. Gabryś. Two individuals were collected from *Mitopus morio* (Fabr.) ♂, and one from *Oligolophus tridens* (C. L. Koch) ♀, (both *Opilionida, Phalangiidae, Oligolophinae*). (2) 11 Aug. 1988, Orzechowo at Ustka (Słupsk province); the crowberry forest; under the stump; collected directly; leg. L. Borowiec. One individual on *M. morio* ♂.

All the mites from localities (1) and (2) were collected from their host's legs.

Oligolophus tridens has not been reported the host of either erythraeid mites or any other species of related families of the cohort *Parasitengona* hitherto (Welbourn 1983, Fain and Elsen 1987, Fain et al. 1987). Remarkable is also the date of collection of the mite from Orzechowo (19 Sept.) which allows to say that the period of occurrence of this species under conditions in Poland limited by Haitlinger (1987) to May – August is in fact longer and lasts until late September. This agrees with data given by Oudemans (1912) which refer to the phenology of this species in Holarctic.

Leptus mariae Haitlinger, 1987

Hitherto, found only in Wrocław province in Poland. No information about the host (Haitlinger 1987). Eleven individuals connected with their host were collected in North-eastern Poland, May 1986, Białowieża Forest (Białystok province); insect sweep net; leg. M. Wanat. Eleven mites on different parts of the body (except for legs and antennae) of *Phyllobius urticae* (De Geer) (*Coleoptera, Curculionidae*). *Ph. urticae* has not been reported a host of either erythraeid larvae or any other species of related families of the cohort *Parasitengona* till now (Welbourn 1983, Fain and Elsen 1987, Fain et al.1987). The new locality points to the wide range of distribution of *L. mariae*.

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