

## NOTE TO THE TAXONOMY OF THE GENUS BREPHOSCELES HULL (ANALGOIDEA, PROCTOPHYLLODIDAE)

Recently, Peterson (Bull. Univ. Nebraska State Mus. 9: 1—172, 1971) published a revision of the genus *Brephosceles* in which he listed 43 species. For technical reasons two species described by Černý (Folia parasit. 14: 87—91, 1967) are not included in this revision. Both species belong to the *decapus*-group characterized by surface fields of epimerites I—IV well developed, genital apparatus not fused with inner margin of pregenital apodeme, setae  $v_1$ , interlobar, postlobar and extralobar lamellae present, setae  $l_1$  bluntly rounded, setae  $d_4$  at midlength of hysterosomal lobes in male and by setae  $c_2$  anterior to genital discs, ventral margins of hysterosoma heavily sclerotized and hysterosomal terminus bilobate with well-developed terminal lamellae in female.

### *Brephosceles balati* Černý, 1967

The following characters may be added to the original description.

**Male:** Propodosomal shield  $97 \times 86 \mu$ , scapular setae included on shield, scapular and humeral shields well developed. Hysterosomal shield  $223 \times 81 \mu$ , divided by a mid-dorsal suture. Setae  $d_3$  positioned in anterior one-third of hysterosomal cleft, distance  $d_3 — d_4$   $16 \mu$ , distance  $d_4 — p_1$   $52 \mu$ . Genital organ extending slightly beyond the level of setae  $c_2$ . Subgenital shield absent, adanal shields well developed and bearing setae  $a$ , preanal apodeme present. **Female:** Propodosomal shield  $89 \times 83 \mu$ , setae  $sh$   $13 \mu$  long, hysterosomal shield  $255 \times 77 \mu$ , setae  $d_3$  and  $d_4$  in trapezoidal arrangement separated by  $32 \mu$ , preanal apodeme present.

*Brephosceles balati* keys to *B. pachyptilae* Peterson, 1971 and *B. puffini* Peterson, 1971. The male differs from both species in smaller size, in the form of genital organ and in less developed lateral parts of surface fields of epimerites II. The relation  $d_3 — d_4 : d_4 — p_1$  is in *B. balati* about 1 : 3, in *B. pachyptilae* 1 : 2 and in *B. puffini* 1 : 1.5. The female of *B. balati* differs from both species in nearly parallel-sided terminal cleft. *B. balati* is a specific parasite of *Puffinus puffinus* (Brünnich). The reexamination of females collected from *Oceanodroma leucorhoa* (Vieillot) and assigned originally to this species showed that they belong to another species. They differ from *B. balati* in slightly divergent hysterosomal lobes, reduced preanal apodeme and more developed lateral parts of surface fields of epimerites II. No males

were collected. Because the species of this *decapus*-group are known to be monoxenic or bixenic (with monogenetic host-association) and because no *Brephosceles* with surface fields of epimerites I and II separate was described from the genus *Oceanodroma*, we may suppose that the mentioned females represent a new species.

### *Brephosceles superbus* Černý, 1967

The comparison of the material from *Oceanodroma leucorhoa* with the type series of *Brephosceles decapus* (Gaud, 1953) from *Oceanodroma castro* showed these mites to be conspecific. *B. superbus* must be therefore considered as a junior synonym of the latter species. It has to be noted that in the female of *B. decapus* the vestigial setae  $l_1$  are situated anterior to setae  $d_4$  and not posterior as stated in Peterson's key.

### *Brephosceles discidium* Peterson, 1970

Černý (Folia parasit. 17: 233—238, 1970) found on several domestic geese in Havana mites of the genus *Brephosceles* which were determined by Peterson as *B. discidium*. But the description of this taxon appeared only in 1971 under the name *Brephosceles discidicus* Peterson, 1971. *B. discidium* Peterson, 1970 must be therefore considered as nomen nudum and a misspelling of *B. discidicus*. When comparing our material with the holotype and allotype of *B. discidicus* some differences are observed: the opisthosomal lobes of our males are distinctly longer, interlobar cleft has another form, with prominent setae  $d_3$ , the females are more slender and less sclerotized, both sexes differ in some inter-setal distances. In contrast to Fig. 98 in Peterson's revision the male of *B. discidicus* has incomplete transversal suture developed only at the base of opisthosomal lobes. To solve the question of correct systematic position of the mites from domestic goose will need additional material. Collections from both species (*Cygnus bewickii* and *A. anser domesticus*) were made in zoological gardens and therefore a transfer from another host cannot be excluded. Due to the fact that the species of the *lambda*-group are known to be monoxenic parasites, the material from Cuba may represent a closely related taxon.

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