

On Phoresy in Pseudoscorpions

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In a recent issue of the *Bulletin*, P.E. Jones (1970) gives a rather misleading impression when he says, regarding phoresy in pseudoscorpions, "In nearly all these cases the species concerned belong to the genus *Lamprochernes*. Cloudsley-Thompson (1956) and Beier (1967) record that only in a few cases has phoresy been confirmed in other genera, e.g. *Allochernes*." While it is true that in Europe representatives of *Lamprochernes* have been found attached to the legs of flies more often than representatives of other genera, records of such behaviour have been noted by Beier (1948) for members of *Allochernes*, *Pselaphochernes* and *Chelifer* as well. Further, *Dendrochernes cyrneus* was reported as attached to the legs of beetles in Europe, *Rhacochelifer similis* was recorded from a dipteran and *Diplotemnus piger* (= *Withius piger*; see Vachon, 1970) from a lepidopteran in nearby North Africa.

If we consider attachment to the legs of various insects from all parts of the world, Beier's list is long, including the genera,

?*Obisium* (probably = *Syarinus*; see Muchmore, 1971), *Oratemnus*, *Lustrochernes*, *Cordyllochernes*, *Parachernes*, *Rhopalochernes*, *Neochernes* [= *Hesperochernes*], *Incachernes*, *Stenowithius*, *Ellingsenius*.

Since Beier's paper appeared, the following other genera have been mentioned as having representatives which attach to the legs of flies or other insects:

Microcreagris (Kaisila, 1949, p. 90)
Apocheiridium (Kaisila, 1949, p. 90)
Dactylochelifer (Beier, 1962, p. 301)

And recently Muchmore (1971) records the following additional genera from North America:

Lechytia, *Paratemnus*, *Pycnochernes*,
Pseudozaona, *Parachelifer*.

Thus, there are many genera other than *Lamprochernes* in which phoretic behaviour is known to occur.

It is noteworthy further that only three species of *Lamprochernes* have been reliably recorded attached

to the legs of flies, namely *L. nodosus* and *L. godfreyi* in Europe and *L. savignyi* in Africa and New Zealand; there are no valid records of such behaviour on the part of any American species of *Lamprochernes*. (see Muchmore, 1971). The latter fact is undoubtedly connected with the preference of American species (contrary to the habit of *L. nodosus*, for example) to live under the bark of dead trees and fallen logs, where contact with flies would be rare. Thus, the only records of any transport of American *Lamprochernes* by insects are of *L. oblongus* under the elytra of bark-inhabiting beetles, a behaviour which is often encountered in the related neotropical genera, *Lustrochernes* and *Cordyllochernes*.

The implication by Jones that pseudoscorpions attach to insects for the purpose of being transported is not yet supported by any unequivocal data. Recorded observations are consistent with the alternate view that a pseudoscorpion grasps a fly's leg as a predator seeking food and that transport may occur by chance if the fly takes to the air before the pseudoscorpion has relinquished its hold. Dispersal could well result under these circumstances, but it would not be the "purpose" of the pseudoscorpion's activities (for a fuller discussion of this point of view, see Muchmore, 1971).

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