The bugs of genus Lincus (Hemiptera: Pentatomidae: Disccephalinae) are considered vectors of Phytoponas palm diseases: 'marchitez sorpresiva' of the African oil palm, Elaeis guineensis Jacq. (Desmier de Chenon et al. 1983, Desmier de Chenon 1984, Perthuis et al. 1985), and hartrot of the coconut tree, Cocos nucifera L. (Desmier de Chenon et al. 1983, Louise et al. 1986). The occurrence of Lincus in primary forest was suggested (Louise et al. 1986); however, nothing on the natural habitat of the bugs is known.

Lincus spp. have been found on Amazonian native palms: 1) in Peru on Astrocaryum macrocalyx Burret (Kahn & Mejia 2057, USM) in the lower Ucayali River basin, on A. sp. aff. A. macrocalyx Burret (Kahn & Llosa 2094, USM, NY) in Madre de Dios, and on A. sp. aff. A. murumuru Mart. (Kahn 2031, NY) in the upper Huallaga valley; 2) in French Guiana near Cayenne on A. murumuru Mart. (de Granville 7222, CAY).

Specimens of Lincus were collected and sent to Dr. Rolston who considered them to be undescribed species.

The presence of both imagos and larvae on the palm trees suggests that the bugs carry out their whole biological cycle there. The frequency and density of bugs were both very high. They were found on 21 (36.8%) of the 57 Astrocaryumn trees dissected. One to sixty bugs were counted per palm, although the use of an axe to cut down the palms and of a machete to dissect them may have allowed the escape of an unknown number of insects.

The four species of Astrocaryum form dense populations in periodically flooded forests. A. macrocalyx and A. sp. aff. A. macrocalyx are single-stemmed palms with a trunk up to 5 m in height. A. murumuru and A. sp. aff. A. murumuru are multi-stemmed palms with clusters of 2–6 axes (generally one adult and several juveniles) which develop trunks up to 3–4 m in height. All four species have large leaves, 6–7 m in length. The sheaths of dead leaves persist on the trunk forming a strongly armed muffle which shelters ants, termites, larvae of curculionid and scarabeid beetles, spiders, scorpions, and snakes.

Lincus spp. were found inside the sheaths of the intermediate and lowest green leaves of the crown, among the spines on the back of the petiole. The bug is brown-black as are the spines, which makes the insect difficult to detect, except by its odor.

No bugs were found on A. macrocalyx near Manaus, Brazil; however, only one palm was cut down and examined. Bugs were sought without success on other species of the genus Astrocaryum (A. chambira Burret in Peru; A. aculeatum

Bugs of the genus *Lincus* seem to be associated with some very closely related species in the section *Ayri* Drude of the genus *Astrocaryum*, all of which are found in seasonally flooded habitats. The relationship of *Lincus* with *Astrocaryum* is now being studied throughout the Amazon basin, and the possible role of *Astrocaryum* spp. as sources of *Phytomonas* is being analyzed.

**Acknowledgments**

This research is supported by Palmas del Espino S. A., and by the international agreement ORSTOM, France/IIAP, Peru. We are indebted to Carlos Arribas and Roland Huguenot for their helpful assistance, and to Kate Clark for her review of the English text.

**LITERATURE CITED**


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