

André PANIS. – *Ooencyrtus puparum* Prinsloo (Hym., Encyrtidae) and *Exochomus nigripennis* (Erichson) (Col., Coccinellidae), new to Mali

Insects living on cassava (*Manihot utilissima* Pohl.) were inventoried during March and April 1988, at the Station de Recherches fruitières et maraîchères (SRFM) in Djikoroni (Mali: District of Bamako), where the cassava mealybug, *Phenacoccus manihoti* Matile-Ferrero, 1977, was found for the first time in Mali. The cassava mealybug was living only on cassava sets recently imported from Brazil (ALASSANE, 1989).

Four predators were identified on cassava mealybug at the SRFM: three Coleoptera Coccinellidae, *Exochomus nigripennis* (Erichson, 1843), *Hyperaspis pumila* Mulsant, 1871, *Scymnus* sp., and one Diptera Cecidomyiidae, *Dicrodiplosis manihoti* Harris, 1981. Known distribution of *Exochomus nigripennis* was Malta, Sicily, Middle East and North Africa till to Saharan oases. It is new to Mali. *Hyperaspis pumila* is a well known sub-Saharan ladybird.

On cassava at the SRFM, chalcid-fly *Homalotylus quaylei* Timberlake, 1919 (Hymenoptera, Encyrtidae) parasitised *Exochomus nigripennis* and a second encyrtid, *Ooencyrtus puparum* Prinsloo, parasitised old nymphs of *Hyperaspis pumila* and adults emerged from one pupa of the ladybird. Both encyrtids were known from sub-Saharan Africa as parasitoids of Coccinellidae.

Ooencyrtus puparum was described by PRINSLOO (1987) only from Senegal as parasitoid of *Platynaspis* sp. (Coccinellidae). So, it is new to Mali.

About 300 species of *Ooencyrtus* are described worldwide, most of them parasitising insect eggs, particularly eggs of Lepidoptera and Hemiptera. Some of them are endoparasitoids of old nymphs and pupae of Coleoptera, Diptera, Hymenoptera or Lepidoptera. Among Coleoptera, they parasitise only Coccinellidae. In sub-Saharan Africa, four species parasitise Coccinellidae (PRINSLOO, 1987): *Ooencyrtus puparum*, *O. azul* Prinsloo, 1987, obtained from pupae of *Chilocorus nigripes* Mader, 1954, in Kenya, *O. distatus* Prinsloo, 1987, obtained from an unidentified coccinellid in South Africa, *O. sinis* Prinsloo, 1987, obtained from pupae of *Exochomus flavipes* (Thunberg, 1781) in South Africa.

PRINSLOO (1987) established that *Ooencyrtus distatus* is an endoparasitoid of an unidentified species of *Homalotylus* parasitising the coccinellid and he assumed that the four species have the same biology. In Djikoroni, *O. puparum* probably develops as hyperparasitoid on *Homalotylus quaylei*, a primary endoparasitoid of *Hyperaspis pumila*. We stated that it is a gregarious species (six females and one male emerging from one pupa of coccinellid).

Five specimens are housed under number 906 in author's collection with the following references: Mali, District of Bamako, Djikoroni, Station de Recherches fruitières et maraîchères, 28.V.1988, H. Allassane leg., off *Hyperaspis pumila* Mulsant, Coleoptera, Coccinellidae, on *Manihot utilissima*, Euphorbiaceae, gregarious parasitoid, all individuals emerging from one pupa of the coccinellid predaceous on *Phenacoccus manihoti* Matile-Ferrero, Hemiptera, Pseudococcidae.

One voucher specimen is housed in Muséum d'Histoire Naturelle of Nice, another one is in The Natural History Museum, London.

REFERENCES

- ALASSANE H., 1989. – Etude des potentialités biotiques d'*Hyperaspis reynevali* Mulsant (Coleoptera, Coccinellidae), prédateur exotique de la cochenille du manioc *Phenacoccus manihoti* Matile-Ferrero (Homoptera, Pseudococcidae). Thèse de Docteur Ingénieur en Sciences agronomiques, Institut national agronomique Paris-Grignon, Laboratoire de Zoologie, 235 p.
- PRINSLOO G. L., 1987. – A revision of the genus *Ooencyrtus* Ashmead (Hymenoptera: Encyrtidae) in sub-Saharan Africa. *Department of Agriculture and Water Supply, Entomology Memoir*, 67: 1-46.