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**RECORD OF ANKYLOPTERYX
OCTOPUNCTATA CANDIDA (FABRICIUS)
(NEUROPTERA: CHRYSOPIDAE), AS EGG
AND LARVAL PREDATOR ON OPISINA
ARENOSELLA WLK., THE LEAF EATING
CATERPILLAR OF THE COCONUT PALM**

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THE chrysopid *Ankylopteryx octopunctata candida* (Fabricius) was newly recorded in association with the larval galleries of *Opisina arenosella* on coconut palms. They were first collected during 1982 from an experimental field at Kannyetty, Quilon Dt., Kerala. Further observations revealed that they consumed the eggs and early instar larvae of *Opisina arenosella*. As early as 1934, Takano had reported this insect as a predator of the sugarcane aphid *Oregma lanigera* in Formosa. The present record is an addition to the check list of predators of *O. arenosella* on the coconut palm. Adults of *A. octopunctata candida* are green in colour, females measuring 8 mm long and 22–23 mm wide (wing expanded) and males 7.0–7.5 mm long and 20–21 mm wide; with soft body and elongated filiform antennae.

Adults are nocturnal and during day time they rest on the leaflets of the palm. The larvae are predacious and possess long hairs on the body and carry exuviae of prey on their back. They feed on the eggs and early instar caterpillars of *O. arenosella*.

Feeding trials have revealed that each first instar larva consumed 2 to 3, second instar 60 to 100 and third instar 100 to 130 eggs of *O. arenosella* per day under laboratory conditions. It was also observed that the third instar predator larva consumed as many as 11 to 19 first instar caterpillars of *Opisina* per day.

The adult of the predator lays pedunculate eggs in batches on the infested coconut leaflets, which hatch in two days. The larval period ranges from 9 to 11 days and larva has 3 instars. Pupation takes place in or near the leaf axils and the pupal period ranges from 10–12 days. The average longevity of the females was 66.4

days (range 50–72 days) while it was 23 days (range 17–35 days) in males, when fed with honey under laboratory conditions.

The chrysopid predator appeared in the field during April and continued to be present till October and absent from November to March. Maximum predator population was noticed during June and July months.

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**GENETIC VARIATION FOR SEED
PROTEIN OF VICIA FABA L.**

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FABABEAN (*Vicia faba* L.), locally known as *bakla*, is one of the under-utilized food legumes in India. This legume seems to be exceptionally productive, and is a valuable source of novel protein. Rain-fed fababean yields 20 g of seed per ha¹. However, seed yield as high as 30 q per ha may be obtained with irrigation. Fababean is used more and more exclusively for its seeds, whose lysine and protein make a good complement to cereals². With sufficient breeding and agro-nomic research support, it could become a top ranking pulse crop of India. The present investigation was conducted to critically examine genetic variation for protein content of seeds in exotic and local fababean collection and determine the scope for improvement of protein along with seed yield.

Eighty four exotic cultivars from West Germany and nine indigenous cultivars from the main centres of All-India Co-ordinated Pulse Improvement Project were evaluated in the field at Hissar during the winter season of 1983 following a randomized complete block design. Each entry was accommodated in 3 m long single row plots spaced 50 cm apart. The spacing between plants within a row was 20 cm. The seed protein was estimated using micro-kjeldahl method and expressed in percentage. The statistical para-