

NEW RECORD OF HYPURUS SP. (Coleoptera : Curculionidae) AS A PEST OF AMARANTHUS DUB/US Ex. Thall. AND AMARANTHUS TRICOLOUR Linn.

Adults and grubs of a new undescribed species of *Hypurus* (Coleoptera: Curculionidae) were observed severely infesting leaves of the amaranth plants grown in vegetable plots in the Instructional Farm of the College of Horticulture Vellanikkara, Trichur during July-September 1985. Members belonging to the genus *Hypurus* have not been recorded from India as pests of amaranth.

Mahal and Dilwari (1979) recorded *Hypurodes portulacae* infesting vegetable plots at Ludhiana. There is no record of the genus *Hypurus* as crop pests, but *H. bertrandi* (Perris) has been reported to infest the garden land weed *Portulaca oleracea* in Egypt (Awadallah *et al.*, 1980) and in California (Clements and Norris, 1982).

The adults are brownish-black, thick set (Fig 1 a and 1 b), about 1.8–2.0 mm long with short yellowish setae arranged in near-linear series on the elytra. The males and females occurred in almost equal proportions. They feed on the leaf lamina by cutting irregular holes on green and red amaranth (Fig 2). The pale yellowish grubs mine into the lamina and cause papery-white blisters (Fig 3). On some occasions, the grubs also mine into the tender stem and petiole. As a result of damage to foliage and other plant parts, the entire plant withers.

The life-cycle was studied in the laboratory by confining freshly emerged adult pairs on small amaranth plants raised in small plastic pots. For confining the insects, nylon net was used. The life-cycle studies were carried out in a BOD incubator at 27°C and 75% RH. Eggs were laid singly in small cavities gnawed by females in leaf tissues, the mean fecundity being 20.5 per female (n=20). The incubation period lasted for 3.1 days (n=50). The mean larval duration lasted for 5.5 days, while the pupal duration was 9.5 days (n=20). Pupation took place in soil in small earthen cocoons. Very rarely, pupae were found attached to the stems of infested plants. The mean adult life-span of the female weevils lasted for 30 days, while for males this period was 20.0 days only. Total mean duration of the life-cycle from egg to adult took 18.1 days for completion.

The authors are grateful to Dr. Swaraj Ghai, Professor of Entomology and Dr. V. V. Ramamurthy, Scientist (Ent), IARI, New Delhi 12 for identifying the specimens.

സംഗ്രഹം

ചീരയിലകൾക്കും ഇളം തണ്ടുകൾക്കും കേടു വരുത്തുന്ന ഹൈപ്പൂറസ് വിഭാഗത്തിൽപ്പെട്ട ഒരു ന. വണ്ടുകളുടെ ആക്രമണം ഇടപ്രഥമമായി റിപ്പോർട്ടു ചെയ്തിരിക്കുന്നു. പൂർണ്ണ വളർച്ച എത്തിയ വണ്ടുകൾ ചീരയിലകൾ കാർന്നു തിന്നുന്നതു മൂലം നിരവധി ദ്വാരങ്ങളുണ്ടാക്കുന്നു. പൂർണ്ണ വളർച്ചയെത്തുന്നതിനു മുൻപ് പ്രാണികൾ ഇലകൾക്കുള്ളിൽ തുരന്നു കോശങ്ങൾ കാർന്നു തിന്നുന്നതു മൂലവും ചെടികൾക്കു കേടുവരുന്നതായി കണ്ടു.

ഈ പ്രാണികളുടെ ഉപദ്രവം ഏറ്റവും കൂടുതലായി കണ്ടത് ജൂലൈ മുതൽ സെപ്റ്റംബർ വരെയുള്ള കാലത്താണ്. ഈ പ്രാണികൾക്ക് ജീവിതദശ പൂർത്തീകരിക്കാൻ ശരാശരി 18.1 ദിവസങ്ങൾ വേണ്ടിവരുന്നു.

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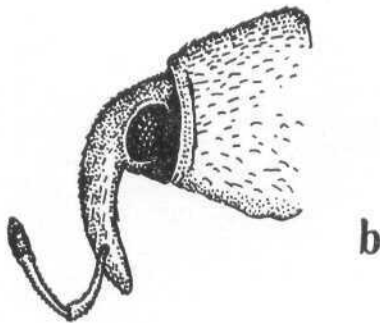
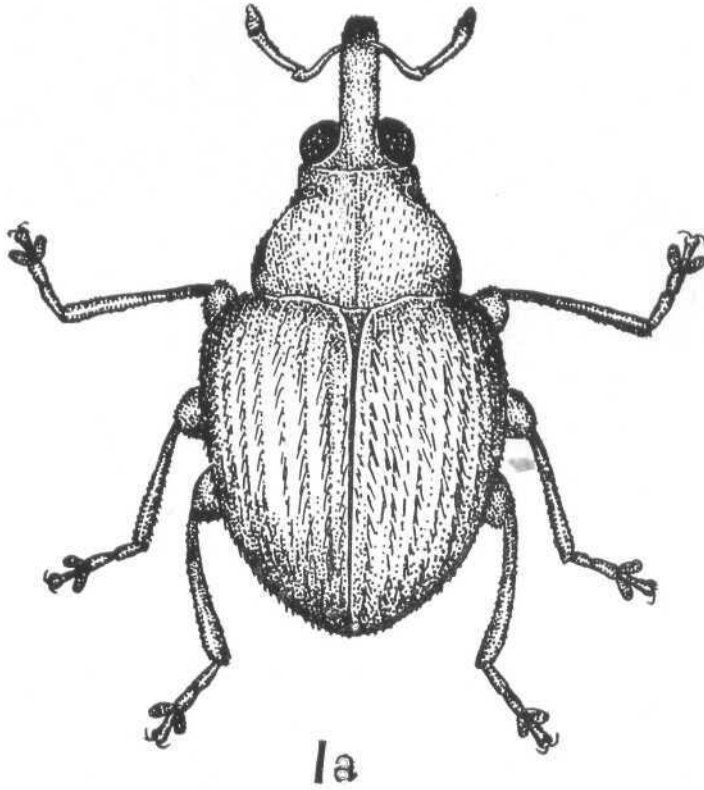


Fig 1(a). Adult female of *Hypurus* sp. (X 40)
(b). Lateral view of head of female

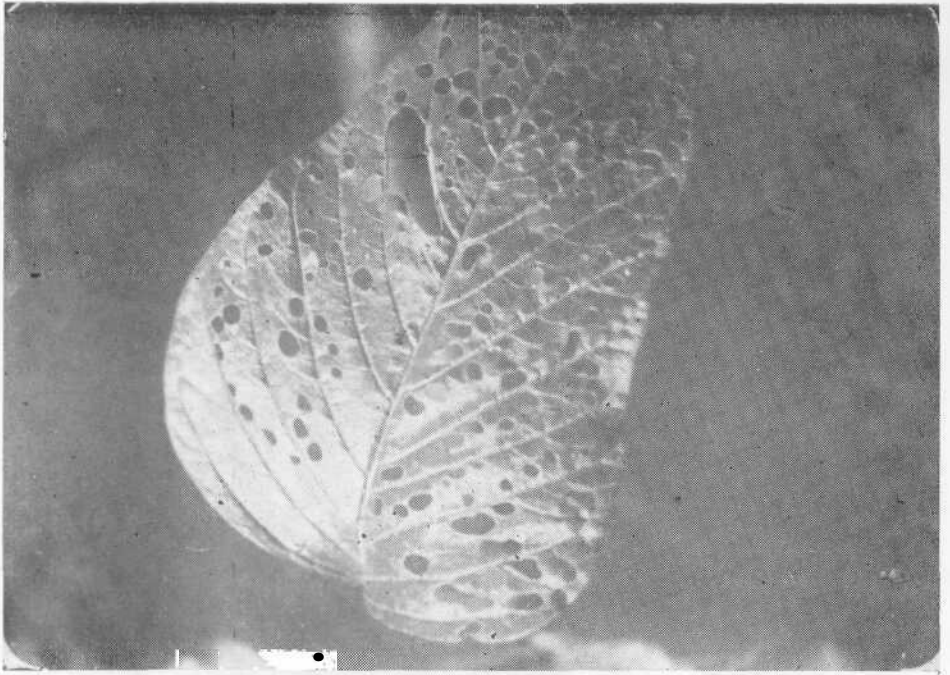


Fig 2. Injury to amaranth leaf caused by adult weevils



Fig 3. Injury to amaranth leaf caused by grubs