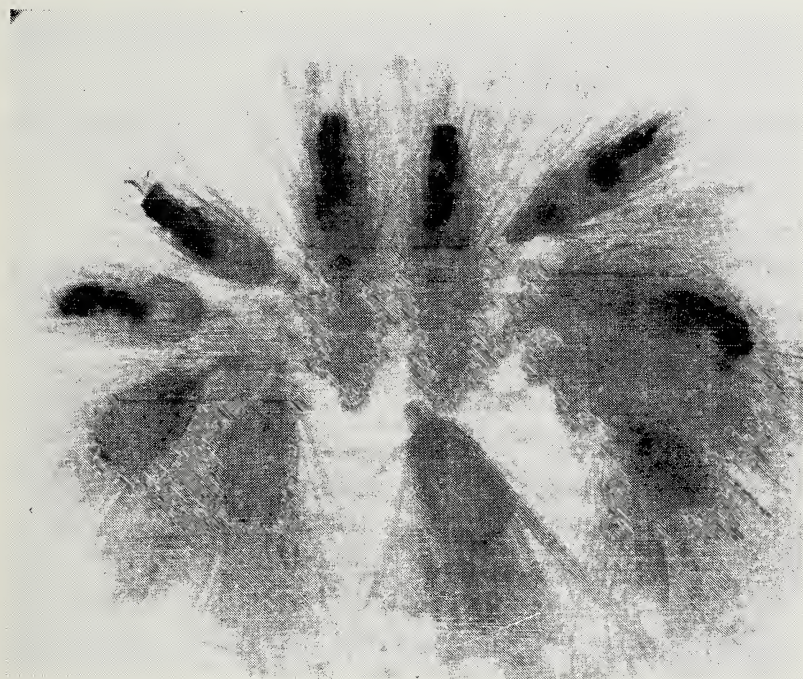


First record of phytophagous *Systasis* (Hymenoptera: Pteromalidae)

by

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For quarantine purposes while screening seeds of *Cenchrus ciliaris* and *C. setigerus* (N.O. Graminae) for hidden infestation by X-radiation (WADHI *et al.*, 1967), at the Division of Entomology, the X-ray plates indicated the presence of infestation in some seeds. The infested seeds were separated from the healthy seeds (Plate 1) after they were made transparent in lacto-phenol (KOURA, 1958) and insects discovered by dissection. These insects were later identified as *Systasis cenchrivora* Farooqui & Menon.



Cenchrus ciliaris seeds, made transparent to show infestation due to *Systasis cenchrivora*.

Of the dozen and a half species described under the genus *Systasis*, the host is known in case of five species only: the rest having been described from material collected by sweeping. These five species are all parasitic in habit viz., *S. dasyneurae* on *Dasyneura lini* (AHMAD, 1939); *S. dalbergiae* on *Contarinia dalbergiae* (MANI, 1942); *S. encyrtoides* on *C. citri* (RUBIN, 1965), *C. medicaginis* (MANNIGER, 1940), *D. affinis* (BOHM, 1954) and *Stenodiplosis panici* (SELANOVA, 1948); *S. diplosidis* on *Retinodiplosis inopsis* and *R. resinicola* (MILLER, 1958) (all dipterous hosts); and *Systasis* sp. on *Noorda moringae*

CHERIAN & BASHEER, 1939) (lepidopterous host), thus suggesting the general habit of the species falling under this genus. Taking the present species also to be parasitic, a thorough search was made for the presence of any insect in *C. ciliaris* and *C. setigerus* seeds. For this purpose more than 2,000 seeds were examined which resulted in the discovery of over 80 specimens of *Systasis*, but no other insect was found. This total absence of any other insect species in the *Cenchrus* seeds, both as independent phytophagous pest or as remains of a parasitised insect strongly suggests that the species under question is phytophagous. Subsequently similar observations were made from two more samples, one each of *C. ciliaris* and *C. setigerus* seeds. The incidence of this pest was noted to be 4.5% and 4% in *C. ciliaris* and *C. setigerus* seeds respectively.

The pests noted on *Cenchrus* are the striped grasshopper, *Mocis repanda* (VICKERY, 1924), the aphid, *Toxoptera graminum* (DAHMS *et al.*, 1954) and the harvester ant, *Iridomyrmex* (CHAMP, 1961) none of which infests seeds or is parasitised by *Systasis*. Therefore the present observation constitutes a first record of *Systasis cenchrivora* as phytophagous in habit and also as a pest of *C. ciliaris* and *C. setigerus* seeds.

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