sites like \textit{B. brevicornis} and \textit{P. nephanitis} of the same pest. At this time it is not certain whether its predacious tendencies toward \textit{N. serinopa} outweigh the harm done by preying on certain larval ectoparasites.

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\section*{EFFECT OF A JUVENILE HORMONE ANALOGUE, HYDROPRENE ON THE FEMALE REPRODUCTIVE ORGANS OF THE RED COTTON BUG, \textit{ Dysdercus koenigii} (F) }

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The juvenile hormone analogues inhibit reproduction if they are applied prior to imaginal ecdysis\(^1\). Nevertheless, in the adult insects the juvenoids were shown to inhibit the development of the oocytes in the ovarioles\(^2\). Moreover they bring about morphogenetic abnormalities in reproductive organs\(^3\). In the present communication we report the activity of the juvenoid, Hydroprene on the ovaries of the red cotton bug, \textit{Dysdercus koenigii} (F).

The rearing method of the red cotton bug was mentioned elsewhere\(^4\). Freshly moulted adult females were given a topical application of 1\(^\mu\)l/sp (1\(^\mu\)g) of the juvenoid hydroprene. The juvenoid was dissolved in acetone. The test insects were dissected on the 5th day after treatment.

In most of the ovaries, the number of oocytes was reduced to 1–5. In many cases, oosorption was a common feature, and in some inhibition of vitellogenesis was observed. The germarium region was also deformed.

The juvenile hormone induces vitellogenesis in several groups of insects\(^5\). The application of the juvenoid to the adult females was shown to cause ovicidal effect in \textit{Pyrrhocoris apterus}\(^1\). Roedendorf and Schmal\(^2\) showed that in \textit{Thermobia domestica}, the administration of juvenoid to the adult females caused derangements such as resorption of the mature oocytes, inhibition of vitellogenesis and reduced number of oocytes. This was supported in the cotton stainer, \textit{Dysdercus cingulatus} with the paper factor\(^7\). Our present investigation is in agreement with the above findings.

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NEW RECORDS OF ILLORICATE ROTIFERS FROM INDIA

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Little is known about bdelloid rotifers of India; only 8 species are known to occur in the country. Three species, *Callidina bidens*, *Rotifer tardus* of the Order Bdelloide, and *Lacinularia socialis* of the Order Rhizota, reported here, are new to India. Besides, a bdelloid rotifer, *Rotatoria neptunia*, recorded earlier, is also found to exist in Dharwar.

Rotifers were collected from freshwater bodies around Dharwar during 1978-1979 with a plankton hand net of nylon bolting cloth (mesh = 50μm). Rotifers adhering to weeds were obtained by rinsing the weeds and sieving the water through the net cloth. The individuals were sorted out after fixing the material in 4% formalin. The trophi were studied by treating the animals with 1% KOH for 2-3 min. Camera lucida drawings were made from live specimens and the species were identified from earlier descriptions.

Order: Bdelloidea
Family: Philodinidae
*Callidina bidens* Gosse (figures 1-3)

The body is spindle shaped and its surface is corrugated. The head when extended, terminates in a thick rounded column with two ciliated wheels. The foot is cylindrical with protrusible lateral toes. Trophi is ramate with thick fulcrum. Each ramus has 4 distinct teeth. It is collected from weedy regions of tanks.

*Rotifer tardus* Ehrenberg (figures 4-7)

The species is conical and dull brown. The body tapers posteriorly and its anterior part is cylindrical, truncate, having a small proboscis at its tip. The retractile foot ends in 3 toes. Trophi is ramate, without fulcrum and with two distinct teeth in each ramus. It is a sluggish rotifer found in the bottom sediments.

*Rotatoria neptunia* Ehrenberg (figures 8-11)

This species, already reported from Andhra Pradesh and West Bengal, also occurs in Karnataka State.

Order: Rhizota
Family: Meliceratidae
*Lacinularia socialis* Ehrenberg (figures 12-14)

It is found in clusters adhering to aquatic weeds. The body is slender with heart shaped corona. The foot, transversely wrinkled and non-retractile, ends in a sucking disc. Trophi is uncinate.

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