PUBLICATIONS

1. Roy, D.K., (1976) Notes on the life-history of *Mesothrips jordani* (Zimmerman) (Thysanoptera: Tubulifera). Journ. of Research, VI (28), pp.113-114, O.U.A.T., Bhubaneswar.

* 2. _____, (1979) On the femur of *Aphis gossypii* Glover. Symp. on Recent trends in Aphidological studies, U.G.C., Bhubaneswar, abstract at P.2.

* 3. Roy, D.K. and Behura, B.K., (1979) Biometrical variation in *Aphis gossypii* Glover. Symp. on Recent trends in Aphidological studies, U.G.C., Bhubaneswar, abstract at P.2.

* 4. _____, (1979) Seasonal variation in the population of *Aphis gossypii* Glover on brinjal, *Solanum melongena* Symp. on Recent trends in Aphidological studies, U.G.C., Bhubaneswar abstract at P. 11.

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NOTES ON THE LIFE HISTORY OF *MESOTHRIPS JORDANI* (ZIMMERMAN) (THYSANOPTERA : TUBULIFERA)

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MESOTHRIPS jordani (Zimmerman) occurs almost throughout the year on *Ficus benjamina* (Oriya-*Bilati bara*) in Cuttack This note embodies the observations on the life history of the thrips species made during 1963-64 in the Post Graduate Department of Zoology, Utkal University, Revenshaw College, Cuttack.

The nymphs of *M. jordani* are most abundant from September to December and are not usually found during January.

Mating :

During mating the first pair of thoracic legs of the male act as clasping organs and the last pair as balancers. The last abdominal segment of the male acts as an intromittant organ. The male crawls over the female and bends the intromittant organ on to the ventral region of the abdomen of the female. Pairing lasts from a few seconds to two minutes.

Oviposition :

The female starts laying eggs 24-48 hours after pairing. The eggs are laid on the dorsal (abaxial side) side of the leaves of *F. benjamina* scattered over the entire leaf They are oval and are found on the leaf surface in a lengthwise manner. The colour of the freshly laid eggs are creamy which gradually turn white. A female lays as many as 40 eggs at a time and lays 120-160 eggs during its life span. The egg stage lasts 7-10 days.

Nymphs :

A nymph on hatching from the egg is whitish in colour and moves freely on the leaf surface. At the time of moulting the nymphs arrange themselves in a characteristic circular manner with their heads pointing towards the centre on the dorsal surface of the leaf and in this position undergo moulting. The first moult takes place two days after eclosion from egg. The nymph of the second

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nymphal instar is larger in size and is more active than that of the first instar. The second nymphal moulting takes place after about 4 days. The third instar nymph which is larger than that of the second instar undergoes moulting after about 3 to 4 days and enters the pupal stage.

Pupa :

The pupa is exposed and quiescent. It undergoes a moult after 1 or 2 days and continues to be inactive. The second pupal moult takes place after about 24 hours. The adult thrips after emerging from the pupal stage are active and fly freely.

The Adult :

It is black in colour, slender and compressed dorsoventrally. The leg terminates in a vesicle (physopoda). The abdomen is ten-segmented and the last abdominal segment is tubular. The body is covered with bristles and more densely on the abdomen, antennae and on the legs. Two ocelli occur beneath the antennae. The antenna is tapering and eight-segmented. The last two segments are nearly fused and only a slight constriction demarkating the two occurs. The tarsus is one-segmented and is provided with 2 claws and an empodium. Spurs are present on the femur, tibia and tarsus. The middle pair of coxae lie farther apart in comparison to the other two. The last abdominal segment carries a tuft of long hairs. The female is devoid of an ovipositor. The males are usually smaller than the females in size. In the female the first pair of legs are comparatively stoutor and thickened than that of the male. While at rest the wings are kept folded over the body in a parallel manner. Preparatory to flight, the tubular portion of the abdomen is curved and the fringed margin of the wings are rubbed against the sides of the abdomen. Thus a sort of wriggling movement is performed before take off.

The entire life cycle is completed in about 18-23 days; the egg stage 7-10 days, the larval stage 9-10 days and pupal stage 2-3 days.

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