

The Systematic Position of *Oidiopsis taurica* (Lév.) Salmon.

IN a review of the recent phytopathological literature in India, Mundkur¹ has called in question the systematic position of *Oidiopsis taurica* var. *macrospora*, which has recently been described by us² as a new variety. In view of his remarks, a clear statement of the present systematic position of the species *Oidiopsis taurica* (Lév.) Salmon seems necessary.

In 1902 Scalia first described the genus *Oidiopsis* for endophytic powdery mildews and referred to it his new species *Oidiopsis sicula* occurring on *Asclepias curassavica* in Sicily. This fungus was considered by Salmon³ to belong to *Erysiphe taurica* Lév. as representing the conidial phase of the latter species. Salmon,³ however, was not satisfied with the systematic position of *Erysiphe taurica* which he considered to be 'distinct generically from the other members of the Erysiphaceae in its completely endophytic habit during the early part of its conidial stage, and in the production of usually branched conidiophores sent up through the stomata'. Confronted with this difficulty Salmon concluded that the best way to meet the situation was to establish a genus for the reception of *Erysiphe taurica* Lév. For this purpose he adopted Scalia's genus *Oidiopsis* and extended its characters to represent not only the conidial phase of the imperfect genus *Oidiopsis* of Scalia but also the perithecial stage of *Erysiphe taurica*. In this emended genus Salmon included the only species *Oidiopsis taurica* (Lév.).

Arnaud⁴ in 1921 considered that Salmon should not have adopted the name of the imperfect form for the perfect one and proposed a new genus *Leveillula* and re-named *Oidiopsis taurica* as *Leveillula taurica* (Lév.). Some mycologists have followed Arnaud, whilst others such as Butler and Bisby⁵ still prefer to use *Oidiopsis* after Salmon.

Judged in the light of this discussion, Mundkur's remark that 'not only the species *O. taurica* but even the genus *Oidiopsis* no longer exists' is rather misleading. He further adds to the confusion when he refers to *Oidiopsis* as the 'imperfect genus' as distinguished from the 'perithecial-stage genus *Leveillula*', although a reference to page 112 of our paper² will make

it clear that the reconstructed ('perfect') genus *Oidiopsis* of Salmon is meant. It is likely, however, that in course of time the generic name *Leveillula* may be generally used as has been done by Gäumann and Dodge⁶ and more recently by Bessey⁷ and by Blumer,⁸ in which case the fungus *Oidiopsis taurica* var. *macrospora* will bear the name *Leveillula taurica* (Lév.) Arnaud var. *macrospora* Uppal, Kamat and Patel. In the meantime, the binomial *Oidiopsis taurica* (Lév.) Salmon is quite in order.

Mr. S. F. Ashby, Director, Imperial Mycological Institute, London, to whom a reference was made in the matter, agrees with the above opinion.

B. N. UPPAL.
M. N. KAMAT.
M. K. PATEL.

College of Agriculture,
Poona,
July 19, 1937.

¹ Mundkur, B. B., *Biochem. and Allied Res. in India*, (*Soc. Biol. Chem., India*), 1936, 7, 120.

² Uppal, B. N., Kamat, M. N., and Patel, M. K., *Ind. Jour. Agric. Sci.*, 1936, 6, 110.

³ Salmon, E. S., *Ann. Bot.*, 1906, 20, 187.

⁴ Arnaud, G., *Ann. des Épiphyties*, 1921, 7, 1.

⁵ Butler, E. J., and Bisby, G. R., *The Fungi of India*, Calcutta, 1931.

⁶ Gäumann, E. A., and Dodge, C. W., *Comparative Morphology of Fungi*, New York and London, 1928.

⁷ Bessey, E. A., *A Text-Book of Mycology*, Philadelphia, 1935.

⁸ Blumer, S., *Die Erysiphaceen Mitteleuropas*, Zurich, 1933.

Swarming of an Indian Cecidomyid Midge (Diptera).

SWARMING in Cecidomyids is not a common phenomenon and as far as available literature indicates, it has so far never been observed in India. Kirby cited by Barnes,¹ (1927) observed the European wheat midge *Contarinia tritici* (Kirby) in large numbers round the wheat heads in the evening which disappeared at 7 P.M., but about an hour afterwards, the midges appeared again in swarms, laid eggs, and totally disappeared by 9 P.M. Wallengren² (1936) reported that appearance in large numbers of *Contarinia tritici* and *Sitodiplosis mosellana* Gehin was cyclic and stated that the period of greatest abundance in the former was about six days.

On Sunday, the 28th February 1937 at 10 A.M., the writer observed several swarms of a Cecidomyid in the vicinity of the Entomological Laboratory, Imperial Agricultural Research Institute, New Delhi. There were thousands of small black midges in each swarm which was therefore fairly thick and cast a shadow on the ground. The swarms disappeared at about 4 P.M. The swarms continued to appear every day in the laboratory compound upto about the 7th of March in the morning and disappeared in the afternoon. Evidently, the species swarmed when it was bright sunshine. The midges showed swift circling and backward and forward movements, and therefore from a distance it appeared as if the swarms were almost stationary. Sometimes quite a large number of midges of a swarm would alight on plants or on the ground and after a short time would again join the swarm. But as a rule the swarms were not seen settling on either cultivated or wild plants or elsewhere near or away from the place at which they appeared.

A large number of specimens were collected and sent to a specialist for exact identification. They have been declared to belong to a species new to science, which is being described as such (*Micromyia indica* sp. nov.) elsewhere.

H. L. BHATIA.

Laboratory of the Imperial
Entomologist, New Delhi,
August 3, 1937.

¹ *J. South-Eastern Agric. Coll. Wye*, 24, 80.

² *Lunds Univ. Arsskr.*, 30, 70. Abstract in *Rev. App. ent. ser. A*, 24, 348.

On Two Hyperparasites of Lac.

THE only way of indicating the importance of parasites among themselves is by giving a table of statistical records of such insect-findings. As far as I am aware, a quantitative analysis of frequency among parasites and hyperparasites of lac has not been studied. But I have found even qualitative or wide differences in the degree of association between lac insect and its associated parasites and hyperparasites not only according to the season and locality but also according to the species of lac insect.

The observations in Bangalore indicated that *Holcocera pulverea* is not predacious on

Lakshadia communis. It is, however, very frequently found attacking the other lac insect, *Lakshadia mysorensis*, while, at the same time, *Holcocera* caterpillars are perhaps more parasitised in association with the Mysore lac insect than with any other of its kind. The species *Lakshadia mysorensis* therefore gives an excellent insight into the association of *Holcocera* with its own parasites. *Apanteles tachardii* came in the first rank, while *Apanteles fakhrulhajii* was its next most effective parasite. This was found also to hold true in studying the insect fauna associated with *Lakshadia nagoliensis* in Sohagpur, Central Provinces.

In Bangalore, *Chelonus cycloporus*, Franz,¹ is rare or unknown, but occupies the third place in descending order of importance in Sohagpur. It is surprising this insect has not been recorded by any other worker on lac. Fig. 1 shows the female *Chelonus cycloporus* and the illustration may now help others to confirm my findings.

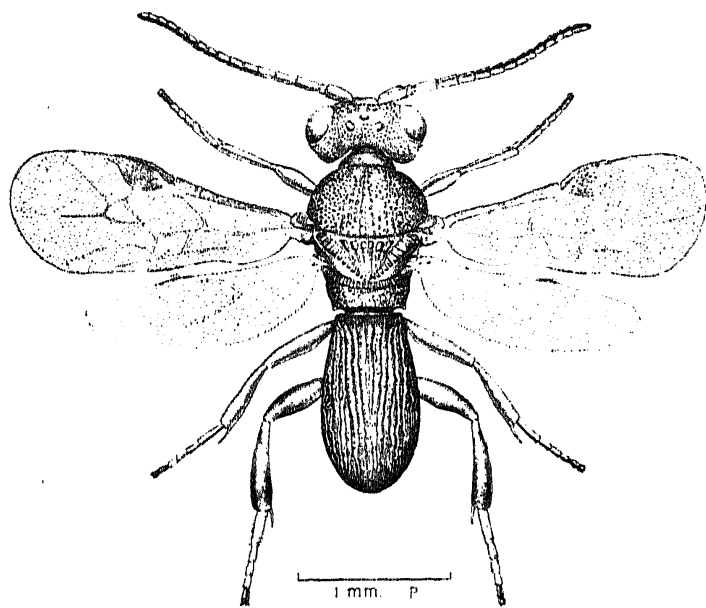


Fig. 1.

Female *Chelonus cycloporus*, Franz.

Young² records rearing an Ichneumon from lac and possibly the same species was illustrated by Stebbing,³ as I have already tried to explain.⁴ Stebbing illustrated a male Ichneumon, while Fig. 2 here records the female of the same insect. It is strange Stebbing's finding has not attracted any comment from any other writer on lac. I identified my specimen as *Pristomerus* and as I found no other insect of this genus it must be identical with *Pristomerus testaceicollis*, Cam., which, according to Glover,⁵

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