THE STATUS OF TRICHOGRAmma CHILONIS ISHII
(HYM. : TRICHOGRAMMATIDAE)

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Abstract. The status of Trichogramma chilonis Ishii is discussed. Based on dissections of syntype material the authors conclude that T. australicum Girault of Nagarkatti & Nagaraja (1971) and T. confusum Viggiani (1976) are synonyms of T. chilonis Ishii (1941), which, on grounds of priority, is the valid name for this Australasian species.

The most frequently encountered Trichogramma species in the Indian subcontinent and elsewhere in Southeast Asia was erroneously believed to be T. australicum Girault (Nagarkatti & Nagaraja, 1968). This arose partly because specimens from India commonly known as T. minutum Riley were sent to the Systematic Entomology Laboratory, U. S. Dept. of Agriculture, Washington, D.C., and to Dr. S.E. Flanders (formerly of the University of California, Riverside) which were returned with the comment that T. minutum was not present in India, and further Dr. Flanders commented that the specimens were indistinguishable from T. australicum. At that time the slides of the type specimens of T. australicum had been loaned by the Queensland Museum to Dr. R.L. Doutt (formerly of the University of California, Berkeley) who on request sent us a photomicrograph of the genitalia of a male, which showed a laterally compressed genital capsule with the dorsal expansion of the gonobase (DEG) somewhat obscured. On this evidence and comparison with the brief original description of australicum (Girault, 1912), we assumed that the common Indian species was T. australicum and redescribed it under that name (Nagarkatti & Nagaraja, 1971).

Subsequently, we were fortunate to get on loan the syntypes of T. chilonis Ishii from the collection of the National Institute of Agricultural Sciences, Tokyo. Examination of the male genitalia indicated that the DEG bore lateral lobes which were characteristic of what we had described for the Indian populations determined as T. australicum. Nagarkatti & Nagaraja (1977), therefore concluded that their T. australicum was in fact T. chilonis Ishii. While our review was in press, Dr. G. Viggiani (pers. comm., 1976) unaware of our conclusion, informed us that he had dissected a male of T. australicum Girault from the original series and found that the DEG was devoid of lateral lobes and correctly concluded that T. australicum is akin to the New World T.

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Published August 1979
minutum and T. pretiosum Riley and named the Indian species as T. confusum, sp. nov. (Viggiani, 1976).

In order to clarify the status of the Indian species, we dissected a syntype of T. chilonis to study the condition of the DEG which was not mentioned by Ishii (1941). The dissected male genitalia clearly showed the lateral lobes (Fig. 1). This character and a comparison of the male antennal characters (Fig. 2) confirmed our belief that the Indian "T. australicum" and T. confusum Viggiani are none other than T. chilonis.

Ishii (1941) mentions that the species was first collected from eggs of Chilo simplex Butler and of Diatraea sp. on rice plants near Los Banos, Laguna, Philippines, and that he later found it in Japan and Taiwan (Formosa). We have also seen specimens from these three countries and also from Malaysia, Sri Lanka and Thailand. Mr. W. Woods, Entomologist, Dept. of Agriculture, Western Australia (pers. comm., 1978) has collected T. chilonis from Southwestern Australia and identified it by the genitalia.

As Ishii (1941) did not designate a holotype, the dissected male of T. chilonis, preserved in the National Institute of Agricultural Sciences, Tokyo, is now designated the lectotype. The slide does not bear a registration number.
A detailed description of the Indian population of *T. chilonis* as "*T. australicum*" is available in our earlier paper (Nagarkatti & Nagaraja, 1971).

ACKNOWLEDGMENTS. We are very grateful to Dr. A. Habu of the National Institute of Agricultural Sciences, Tokyo, for the loan of type specimens.

REFERENCES


