

***Trichogramma* spp. (Hymenoptera: Trichogrammatidae): A Potential Biocontrol Agents of *Plecoptera Reflexa* (Shisham Defoliator)**

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Abstract—*Trichogramma* are microhymenopteran endo-parasitoids whose role as biocontrol agent in suppressing many lepidopteron pest species of crops, vegetables, orchards and forest trees is well documented. *Plecoptera reflexa* is an important defoliator of *Dalbergia sissoo* which can cause drastic reduction in timber production. The present study was conducted to determine the parasitism efficacy of *Trichogramma* spp. on the host eggs of *Plecoptera reflexa* Guen. Three species of *Trichogramma*, viz. *T. japonicum*, *T. pieridis* and *T. pretiosum* were tested for parasitisation. Five replications of each treatment were maintained in the laboratory at the temperature of $27\pm 2^{\circ}\text{C}$ and 75-90% relative humidity. All the species of *Trichogramma* induced parasitisation in *P. reflexa* eggs in varying degrees. *T. pretiosum* caused maximum average parasitisation of $71.00\pm 3.82\%$ when 100 eggs of *P. reflexa* were exposed to 5 pairs of parasitoids while *T. japonicum* showed the minimum average parasitisation $37.40\pm 2.80\%$. *T. Pieridis* has showed the average parasitisation of $48.40\pm 3.75\%$. All three species of *Trichogramma* accepted the eggs of *P. reflexa* and completed their life cycles and emerged out of host eggs in 8-9 days.