

TAVARES, J. & J. VOEGELÉ (1991). Influence of the phototropism over the egg laying rhythm and emergence of three *Trichogramma* species (Hym., Trichogrammatidae). *Communication presented at the 4th European Workshop 'Insect parasitoids', held in Perugia, Italy, 3-5 April 1991; 5 ref.*

ABSTRACT:

The egg parasites of the genus *Trichogramma* (Hym., Trichogrammatidae), are important Biological auxiliaries used in over 20 million acres, in more the 20 countries around the world, for the control of agricultural pest namely lepidopterans (*Trichogramma* News, 1988), having Portugal a contribution of over 400 acres in 1990. The obtainment of the necessary amounts of *Trichogramma* with the desired quality, passes fundamentally by the knowledge of its biology and etology as well as by the usage of efficient production techniques. In this time, the influence of the photoperiod's over the egg laying rhythm and emergence of three *Trichogramma* species. *Trichogramma biesi* VOEGELÉ, *T. maidis* PINTUREAU & VOEGELÉ and *T. embryophagum* HARTIG, accepted as representatives for three vegetables extracts, respectively of low medium and high altitudes, where studied.

The obtained results demonstrated the influence of the relead factor in the egg laying rhythm and emergence of individuals, acting directly in the amplitude of its heterogeneity. In consequence, we are found certain divergences in the behaviour of the species, in particular as regards the laying period. *T. biesi* parasitizes the majority of *Ephestia kuehniella* Zeller (Lep., Pyralidae) eggs during the first afternoon and night. For *T. maidis* and *T. embryophagum* there is a first ware of strong parasitism in the final of the photophase and another ware 12 hours after, in the end of the scotophase. Relatively to the emergence, it happens mostly during the afternoon for *T. embryophagum* and during the photophase and the end of the scotophase for the other two species.