The pipunculid fly *Tomosvaryella frontata* develops on nymphs and adults of *Opsius stactogalus*, a leafhopper attacking *Tamarix* spp., a widespread ornamental plant in the coastal areas of Italy.

Females of this fly oviposit into the abdomen of young nymphs; usually only one egg is laid by a single female, but up to three larvae were found into the abdominal cavity of a single nymph. Larval growth requires around 30-35 days. During this period the young larva is located in the ventral part of the host abdomen, under the gut. The young larva shows a very unsclerotized cuticle without scultures and a well developed anal pouch. The head of the mature larva is bilobate, with well elongated maxillary palps bearing a series of different sensilla at their top. As far as the cephalopharingeal skeleton is concerned, both young and mature larvae have only one pair of undeveloped oral hooks, lacking the intermediate sclerite and the dorsal and ventral cornua. During its development the larva is located with its head towards the last abdominal segments of the host; but in the last phase the head is towards the first abdominal segments. Thus, before abandoning the host, the mature larva breaks through the cuticle of the adult leafhopper. The emerging larva is active; the cuticle of each segment has typical features that enable considerable movements in search for a pupation place. Externally the respiratory system shows a pair of anterior spiracular openings and two posterior spiracular openings on a single spiracular plate, in the dorsal part of the last abdominal segment. The role of certain morphological characters of young and mature larvae are discussed.