



of *R. persuasoria* were compared with totals of *S. noctilio*. Block samples were also taken from other infested trees, opened and larvae removed and counted. Percentage parasitism in each case was determined.

#### LIFE HISTORY AND BEHAVIOUR OF *Rhyssa persuasoria* (L.)

Adult *Rhyssa persuasoria* begin emerging before those of *S. noctilio* in the early spring, emergence continuing for about four months (Fig. 1). The first males emerge some days before females. Males wait about the probable site of emergence and mate with females as soon as they emerge, the period spent in copulation being from 1.5 to 5 minutes, occasionally longer.

Females appear ready to oviposit about 24–48 hours after mating, when they begin searching the surface of pine logs with the tips of their antennae, tapping along and into crevices and holes in the bark. When about to insert their ovipositor the abdomen is raised almost vertically and the long ovipositor and sheath is brought ventrally, and its tip placed centrally between the front and middle tarsi. During oviposition the ovipositor is guided and supported between the hind coxae, and the sheath bends away to the side ultimately clearing the wood surface and straightening behind the insect before the ovipositor is fully inserted. After removal from the wood the ovipositor is cleaned between the hind tibiae and placed back in its sheath.

The time taken to make one complete insertion and withdrawal varies considerably with the condition of the wood, particularly the presence of siricid oviposition holes and exit tunnels. However, on the average it would take about 15 minutes to complete one oviposition, though times from 3–25 minutes have been recorded.