

**Suborder CYCLORRHAPHA**  
**Division ASCHIZA**  
**Superfamily LONCHOPTEROIDEA**

**45. Family LONCHOPTERIDAE**

By Kenneth G.V. Smith

**L**onchopteridae is a small monogeneric family containing 37 described world species. Saigusa (1975) has claimed that a further 30 species await description from the Oriental Region. Adults of *Lonchoptera* are small, slender, brownish or yellowish flies with pointed wings and sexually dimorphic venation. These flies have a rapid, jerky walk and occur in humid places such as shady woods with thick leaf litter or on wet stones near streams in damp forests. One species is cosmopolitan and parthenogenetic (Stalker 1956) and is the only identifiable species found in the Australasian/Oceanic Regions. Another, apparently undescribed species, occurs in the Solomon Islands.

The cytological studies by Baud (1973) showed that dioecious species of *Lonchoptera* have a similar karyotype, all presenting a diploid number  $2n = 6$ ; 4 metacentric and 2 submetacentric. The parthenogenetic *L. furcata* has a chromosome number

of  $2n = 4$ . Baud suggested that supposed males of *L. furcata*, recorded by some authors [e.g., Smith (1969), who suggested that the species is parthenogenetic in only part of its range], must belong to a different species. This view is not supported by Coulson & Butterfield (1982) or Drake (1983). Clonal diversity in this interesting species has been studied by Ochman *et al.* (1980).

Very little is known of the habits of the immature stages, but they are usually found among dead leaves and other decaying matter (Smith 1969). They have also been found between the leaves of Brussels sprouts and on the moist surface of swede turnips, especially during wet weather. Thus, the transport of vegetables by commerce, combined with parthenogenetic reproduction, may explain the cosmopolitan distribution of *L. furcata*. Baud (1973) studied the biology of 5 species and established that the larvae have 6 instars.

**Genus LONCHOPTERA Meigen**

*MUSIDORA* Meigen, 1800: 30. Suppressed by I.C.Z.N., 1963b: 339.

**LONCHOPTERA** Meigen, 1803: 272. Type species: *Lonchoptera lutea* Panzer, 1809, subs. mon.  
Panzer, 1809: 20.

**furcata** Fallén, 1823f: 1 (*Dipsa*). "Europe"; Australia (NSW, Vic), Hawaiian Is, NZ (NZ); N. & S. Am.  
*dubia* Curran, 1934a: 5. USA.