

Distribution: Holarctic species, occurs in North America and northern Eurasia.

Ochlerotatus (Ochlerotatus) pulcritarsis
(Rondani 1872)

Female: Very similar to the females of *Oc. berlandi*. A slight difference exists in the scutal colouration pattern. Whereas the scutum of *Oc. berlandi* has clearly contrasting by dark and pale golden scales, *Oc. pulcritarsis* exhibits a weaker pattern of pale and dark scales on the scutum, and looks rather uniformly golden brownish in colour. However, the median and lateral stripes may be somewhat lighter than the submedian spots.

Male (Fig. 10.69): The hypopygium is very similar to that of *Oc. berlandi*. The spine-like seta on the basal lobe of the gonocoxite is usually less curved at the apex, and rarely hooked.

Larva: The head is square shaped, and somewhat broader than long. The antenna is almost as long as the head, and the antennal shaft is smooth. The antennal seta (1-A) has 3–4 branches, inserted at about the middle of the antennal shaft (Fig. 8.58c). The postclypeal seta (4-C) is small and multiple-branched. The frontal setae (5-C to 7-C) are well developed and multiple-branched. The comb consist of 6–10 (usually 8) scales

arranged in one row (Fig. 10.70). Each scale is large with a well developed median spine, and small spines on the basal half of the scale. The siphon is dark, almost black, slightly tapering in the apical half, and the siphonal index is 4.0–5.0. The pecten consists of 18–22 evenly spaced teeth. Each individual tooth is blunt ended with 3–6 heavily sclerotized lateral denticles. The siphonal tuft (1-S) has 3–4 branches, is about as long as the width of the siphon at the point of origin, and is situated below the middle of the siphon. The saddle covers about half of the anal segment. The saddle seta (1-X) is longer than the saddle and is single. The upper anal seta (2-X) has 4–5 branches of variable length. The lower anal seta (3-X) is longer than the siphon, and single. The anal papillae are very long, sausage shaped, and several times longer than the saddle.

Biology: Hibernation takes place in the egg stage, and the species has usually two generations per year, but sometimes only one generation occurs. The larvae can be found in tree-holes, stumps and among roots of deciduous trees, such as *Quercus* sp., *Platanus* sp., and *Ulmus* sp., the latter being preferred, as well as in olive tree-holes (Shannon and Hadjinicolaou 1937). The water temperature of the breeding sites never exceeds 21°C even in southern European climatic conditions. Similar observations were made along the Black Sea shore in Bulgaria (Bozkov et al. 1969). Larval development may last up to two months. Adult females are

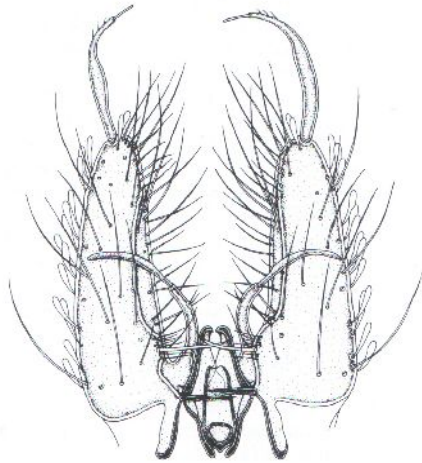


Fig. 10.69 Hypopygium of *Oc. pulcritarsis*

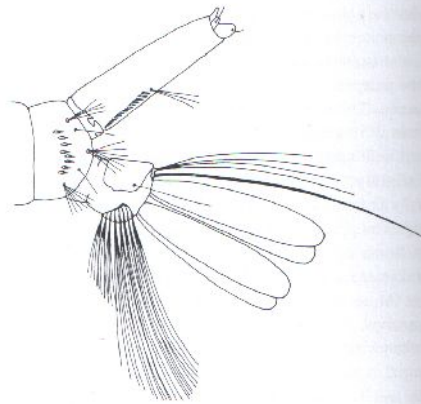


Fig. 10.70 Larva of *Oc. pulcritarsis*

anthropophilic; they bite outdoors during daytime (Rioux 1958). Adult mosquitoes of both sexes were found in stables and houses in a village where no trees were present. This may indicate that the species is facultatively zoophilic and could breed in artificial containers or have a considerable migrating capacity (Shannon and Hadjinicolaou 1937).

Distribution: *Oc. pulcritarsis* is principally a species of the Mediterranean region. Its northern distribution range reaches as far as the Czech Republic. It is also found in central and southeastern Asia.

Note on systematics: One subspecies, *ssp. asiaticus* Edwards is reported in Uzbekistan, Turkmenia, and Pakistan.

Ochlerotatus (Ochlerotatus) pullatus
(Coquillett 1904)

Female: A medium sized species. The proboscis is dark scaled, and the palps are predominantly dark scaled with a few scattered pale scales at the joints of the palpomeres. The clypeus is blackish brown, and the pedicel is dark brown with a few pale scales. The vertex and occiput are covered with pale yellowish narrow scales and erect forked scales of the same colour on the dorsal part and usually broad appressed yellowish white scales laterally. The integument of the scutum is black, and the scutum is covered with yellowish brown narrow curved scales, disconnected by several bare longitudinal stripes and areas to which they contrast, mainly due to the exposure of the dark integument. The transverse suture, prescutellar area, and lateral ends of the scutum are also devoid of scales. The setae of the scutum are usually golden brown, sometimes blackish brown, and are more numerous on the posterior part. The scutellum has narrow pale scales and yellowish brown setae on the lobes. The pleurites have patches of broad yellowish white scales, a hypostigmal patch of scales is present, and the postprocoxal membrane is bare. The mesepisternal patch of scales is divided into an upper and lower portion, and the upper patch does not reach the anterior margin of the mesepisternum (Fig. 6.43a). The mesepimeral patch of scales reaches near the lower margin of the mesepimeron, and 1–5 lower mesepimeral setae are present (Fig. 6.44a). The femora have dark brown and pale scales intermixed, but are darker apically with a pale knee spot. The tibiae and tarsomere I are dark brown, and speckled with pale scales, espe-

cially on the ventral surface. The remaining tarsomeres are entirely dark scaled. The wing veins are covered with narrow dark scales, and with patches of pale scales at the base of the costa (C), radius (R) and anal vein (A). Abdominal tergum I has a broad patch of white scales, terga II–VII are blackish brown scaled with a basal transverse band of white scales which are sometimes slightly widened laterally, and the abdominal sterna are mostly white scaled. The cerci are exceptionally long and conspicuous.

Male: The lobes of tergum IX have 5–7 short stout setae. The gonocoxite is long and slender, about three times as long as it is wide, with its inner surface densely covered with long setae (Fig. 10.71). The basal lobe of the gonocoxite is prominent and has 3 setae which are distinctly larger than the rest, one long stout apically curved spine-like seta inserted dorsally and two sinuous, flattened and slightly lanceolate setae arising from the ventral surface of the basal lobe (Fig. 7.31b). The apical lobe is well developed, thumb-like, with numerous setae at the tip. The gonostylus is about half as long as the gonocoxite, curved, slightly expanded before the middle, bearing a few small setae close to the apex, and the apical spine of the gonostylus is long and slender. The paraproct is heavily sclerotized apically. The claspette stem is long, swollen, and strongly bent in the middle, without a thorn shaped process, the basal half is stout, and the distal half is slender. The

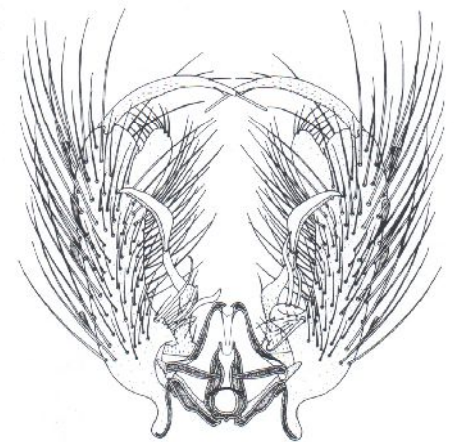


Fig. 10.71 Hypopygium of *Oc. pullatus*