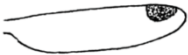



**KEY TO SPECIES OF LONG-PALPED CRANEFLIES OTHER THAN TIPULA
by ALAN STUBBS 1994. Revised by John Kramer - 2016**

Genus CTENOPHORA

Spectacular species that mimic wasps to varying extents. Larvae live in dead wood.

1.	Wings with a large brown patch near apex. [subgenus <i>Cnemoncosis</i>]	 ornata
-	Wings clear but with a small black stigma. [subgenus <i>Ctenophora</i>]	2
2.	Abdomen with five or six yellow bands, each one on posterior edge of a black abdominal tergite.	 flaveolata
-	Variable species. Abdominal tergites with any pattern based upon side markings, not strictly banded and often including orange area.	pectinicornis

Genus DICTENIDIA (*bimaculata*)

The single British species has a mainly black body and very distinctive wings bearing a dark stripe across the wing below the stigma and a dark wing tip. Larvae live in dead wood of a number of different species.

Genus DOLICHOPEZA (*albipes*) [the white-footed ghost]

The single British species is blackish, with no discal cell (an open discal cell) and mainly white tarsi. There is no other crane fly in Britain of this description. Larvae live under moss and liverworts on vertical moist stream banks.

Genus NEPHROTOMA (tiger craneflies)



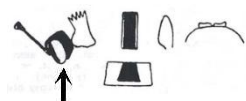


The genus is characterised by yellow and black stripes, at least on top of the thorax. *Ctenophora flaveolata* has a yellow and black banded abdomen but with the 3 yellow bands at the posterior margin of the tergites. Two *Cylindrotomidae* (*Cylindrotoma* and *Diogma*) also have a striped thorax but with differing venation.

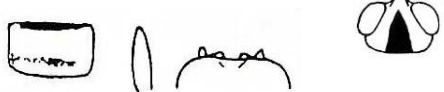




Sharp cerci have a long taper to a point.

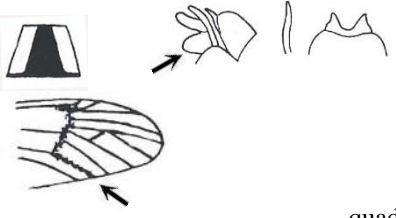
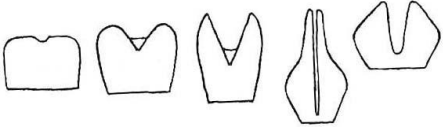






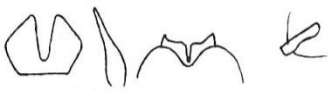






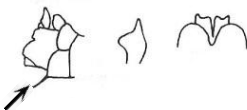
Blunt cerci are parallel-sided and rounded at the tip, even if they seem pointed without magnification.





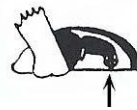




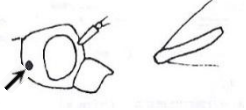



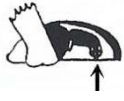
1.	Wings with a pale stigma.	2
-	Stigma dark or intermediate.	5
2.	Pleura with ill-defined weak markings. Male with longer outer clasper and sternite 8 broadly notched. Female with blunt cerci.	 scurra
-	Pleura with sharply defined black markings. Male with shorter outer clasper and sternite 8 with almost straight hind margin bearing a short projecting median tongue. Female cerci pointed.	 3
3.	Side of thorax (pleuron) with a black inverted U-marking between the wing base and the haltere base. Tergites with a broad dorsal stripe.	 appendiculata
-	Side of thorax without such a marking. Tergites with a narrower dark dorsal stripe. (Overall a more brightly yellow species.)	 4
4.	Prescutum with median black stripe narrowly margined by a dull black strip. Top of head with a broad-based onion-shaped stripe. Tergites on lateral margins with spaced dark spots	 flavescens



-	Prescutum with median dark stripe entirely glossy. Top of head with a narrower stripe. Tergites on lateral margin with streaky marks forming a semi-continuous stripe	 <p style="text-align: right;">submaculosa</p>
5.	Abdomen with yellow and black bands, the mid-line front of each central tergite being broadly yellow.	6
-	Abdomen with a dark median stripe, broken or continuous, any yellow breaks at front of tergite being minor.	7
6.	Top of head mainly yellow, with at most only a minor median stripe. [male outer clasper pear-shaped in outline, with a slender apex]	 <p style="text-align: right;">flavipalpis</p>
-	Top of head entirely black in basal half. Three complete yellow bands on abdomen.	 <p style="text-align: right;">crocata</p>
7.	Postnotum with dark hairs or with long pale hairs <u>and</u> a dark seam across wing. Squamal bristles present.	 <p style="text-align: right;">8</p>
-	Postnotum bald or with sparse pale hairs. Squamal bristles absent.	9
8.	Postnotum with mainly dark hairs. Wings with a dark stigma only. Male inner clasper with long <u>pointed</u> posterior 'wings'; tergite 9 as shown. Female tergites with median spots. Cerci pointed.	 <p style="text-align: right;">guestfallica</p>

-	Postnotum with mainly pale hairs and wing with dark seam across wings below stigma. Seam may be faint. Male inner clasper with long <u>blunt</u> posterior 'wings'. Female tergites with triangular median markings. Cerci blunt.		quadrifaria
9.	Males		10
-	Females		18
10.	Sternite 8 notched or cleft, often strongly so; without projecting median process. Outer clasper elongate.		11
-	Sternite 8 with an almost straight posterior edge but with a projecting median tongue or long process. Outer clasper fairly short.		15
11.	Sternite 8 only slightly notched. Outer clasper long and narrow.		analis
-	Sternite 8 more strongly notched or cleft. Outer clasper elongate, but wide at base, then often tapered or abruptly narrow.		12
12.	Sternite 8 with strong median notch as shown. Outer clasper not particularly long or slender.		scurra
-	Sternite 8 more deeply cleft. Outer clasper longer, very slender in apical part. Antennae serrate.		13

13.	Flagellar segments only mildly knobbly. Sternite 8 bulbous at base and with a broad cleft, not fringed by hairs. Dark spot behind eye. (rare)		lunulicornis
-	Most flagellar segments strongly serrate (knobbly). Sternite 8 either very elongate with narrow cleft, or with broad V-cleft.		14
14.	Antenna very long, with 19 strongly serrate (knobbly) segments. Sternite 8 diamond-shaped in ventral view, with long apical processes, and narrowly cleft to near base.		dorsalis
-	Antenna with 13 serrate segments. Sternite 8 more wedge-shaped, with deep V-cleft, bordered by dense hairs. (rare, on dunes.)		quadristriata
15.	Outer clasper with a triangular extension on hind edge. Sternite 8 with a projecting large median process.		16
-	Outer clasper with plain hind edge. Sternite 8 with a projecting median tongue that is not especially conspicuous.		17
16.	Sternite 8 with a blunt median process.		cornicina
-	Sternite 8 with a long curved spine.		aculeata

17.	Prescutum on top with lateral stripes partly fused with median stripe. [otherwise similar to <i>appendiculata</i> ; very rare, on sandy heathland.]		sullingtonensis
-	Prescutum with stripes completely separated. [keyed here for exceptional specimens with dark stigma]		appendiculata
	Females		
18.	Cerci blunt.		19
-	Cerci pointed.		23
19.	Side of prescutum with a dull matt black spot attached below anterior end of sublateral stripe		analysis
-	Sides of prescutum shining and without detached spot below sublateral stripe		20
20.	Lower part of pleura without black spots between coxae (view from side or below). Tergite with a very narrow median stripe. [keyed here for few examples with a dark stigma]		scurra
-	Lower part of pleura with dark spots between coxae. (typical of genus)		21

21.	Back of head at side with a black spot. Flagellar segments very long. (Rare)		lunulicornis
-	Head without this spot. Flagellar segments shorter.		22
22.	Antennae with 15 segments. Female flagellar segments normal, ie. not knobbly. (mainly sandy stream and river banks)		dorsalis
-	Antennae with 13 segments. Flagellar segments short. (rare, sand dunes).		quadristriata
23.	Cerci pointed. Prescutum shining at sides, with an isolated spot below the anterior end of the sublateral stripe. (Rarely this spot can link with the sublateral stripe or is very faint.) Tergites quite elongate with somewhat triangular median markings. (Very rare.)		aculeata
-	Prescutum with dull dark spot at side that is joined to the shining sublateral stripe. Tergites less elongate and usually with more parallel sided median markings.		24
24.	Pleura with mainly orange brown markings (any black marks ill-defined).		cornicina
-	Pleura with some sharply defined black markings.		25

25.	Prescutum on top with lateral stripes partly fused with median stripe. (otherwise similar to <i>appendiculata</i> ; very rare, on sandy heathland.)	 <p style="text-align: right;">sullingtonensis</p>
-	Prescutum with stripes completely separated. (keyed here for exceptional specimens with dark stigma.)	 <p style="text-align: right;">appendiculata</p>

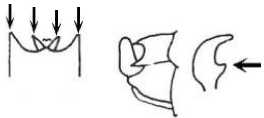


Genus NIGROTIPULA (*nigra*)

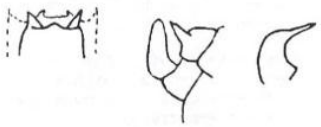

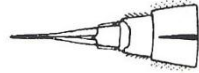
The single species is characteristically dark chocolate brown with plain brown-tinted wings. There are no *Tipula* of this description with a black-haired postnotum so *Nigrotipula* is readily recognised in both sexes.

Genus PRIONOCERA

There are three grey species, bearing a dark median stripe on the abdomen, and the wings are rather plain apart from a whitish lunule below the dark stigma. The genus is distinct in that the flagella are rather serrate and lack whorls of long bristles. The larvae are aquatic in ponds, carr and bogs.

Key to males



1.	Tergite 9 with four strong pointed horizontal processes, the inner pair close together and splayed. [Inner clasper with basal projection giving adjustable-spanner profile]	 <p style="text-align: right;">turcica</p>
-	Tergite 9 with two or four shorter upturned processes, with a wide gap between those nearest the mid-line.	 <p style="text-align: right;">2</p>
2	Tergite 9 with four small pointed projections, plus a rectangular median plate. [Inner clasper bulbous at base before slender beak] [rare]	 <p style="text-align: right;">subserricornis</p>

-	Tergite 9 with only two pointed processes (but take care not to add features on sternite 10); the hind margin of the tergite comes to a median point (as in <i>turcica</i>) but the splayed projections are much further apart. [Inner clasper long tapering, rare]	 <p style="text-align: right;">pubescens</p>
	Key to females	
	Note that sternite 8 has large lateral flanges, a useful cross-check if the antennae are missing. No <i>Tipula</i> of similar colour have this flange.	
1	Tergite 8 with black hairs at sides (view from above and take care with lighting - pale hairs can look dark from some angles). [rare]	 <p style="text-align: right;">subserricornis</p>
-	Tergites 8 with pale hairs at sides. (view from above and take care with lighting - black hairs can look pale at some angles).	2
2	Back of head with dark mark broader than rostrum. Head and thorax distinctly pubescent.	pubescens
-	Back of head with dark mark narrower than rostrum.	turcica

The wings of *pubescens* are weakly tinged. *P. turcica* is variable but usually has much more strongly tinged wings

Genus TANYPTERA

The two species have shining black bodies, with or without some red on the abdomen. The long sabre-like ovipositor looks fearsome on these large ichneumon-wasp mimics. They are scarce species that develop in dead wood.

1	Trochanters orange. Male tergite 9 underlain by large flanges. Female tergites 1-3 usually mainly red.	 <p style="text-align: right;">atrata</p>
2	Trochanters black. Male tergite 9 underlain by small pointed hidden processes. Female tergites 1-2 usually mainly red.	 <p style="text-align: right;">nigricornis</p>