

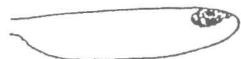
Genus key already circulated. Test key amended spring 1999

# KEYS TO LONG-PALPED CRANEFLIES OTHER THAN TIPULA

## Genus CTENOPHORA

Spectacular species, to varying extents mimicing wasps and ichneumon wasps. Larvae live in dead wood.

1. Wings with a large brown patch near apex. [subgenus *Chamaecosis*]



*ornata*

- Wings clear. [subgenus *Ctenophora*]

2. Tergites with yellow and black bands.



*flaveolata*

- Tergites with any pattern based upon side spots, not strictly banded and often including orange areas.

*pectinicornis*

## Genus DICTENIDIA (*bimaculata*)

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

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

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

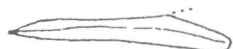
## Genus NEPHROTOMA [tiger crane flies]

The genus is characterised by yellow and black striped crane flies, at least on top of the thorax. *Ctenophora flaveolata* has a yellow and black banded abdomen (but with the yellow bands at the posterior margin of the tergites) and two *Cylindrotomidae* (*Cylindrotoma* and *Dioigna*) have a striped thorax.

The key is constructed so as to take out most of the common species early on. To allow for stigma variation, two species which rarely have a dark stigma are repeated.

Larvae are in dry and moist soil, especially sandy soils on dunes, heaths and river banks. Some occur in grassland, heath and woods on other soils.

Sharp cerci have a long taper to a point.



Blunt cerci are parallel-sided and rounded at the tip, even if superficially they seem pointed.



1. Wings with a pale stigma.

- Stigma dark. (*intertexta* or *mountain cases* repeated here).

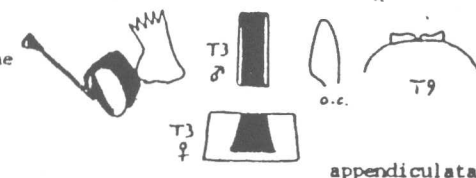
2. Pleurae with ill-defined weak markings. Male with longer outer clasper and sternite 8 broadly notched. Female with blunt cerci.



- Pleurae with sharply defined black markings. Male with shorter outer clasper and sternite 8 with almost straight hind margin bearing a projecting median tongue. Female cerci pointed.



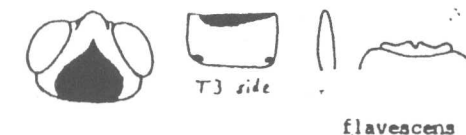
3. Side of thorax with a black inverted U-marking between the wing base and the haltere base. Tergites with a very broad stripe.



- Side of thorax without such a marking. Tergites with a narrower dark stripe. [overall more brightly yellow species]



4. Praescutum with median black stripe narrowly margined by a dull black strip. Top of head with a broad stripe. Tergites on lateral margins with spaced dark spots.



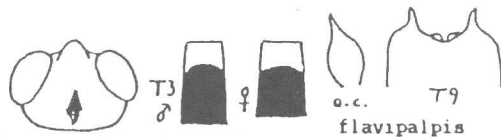
- Praescutum with median dark stripe entirely glossy. Top of head with a narrow stripe. Tergites on lateral margin with streaky marks forming a semi-continuous stripe.



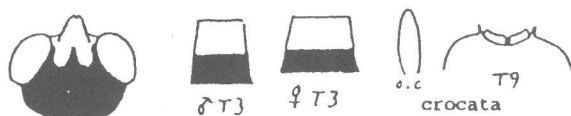
5. Abdomen with yellow and black bands, the mid-line front of each tergite being broadly yellow (as seen from above)

- Abdomen with a dark median stripe or spots, any yellow breaks at front of tergites being minor.

6. Top of head mainly yellow, with at most only a minor median stripe. [male outer clasper dumpy before a slender apex]



- Top of head entirely black in basal half.



1. Postnotum with long pale or black hairs, at least at sides. + strong black markings on pleurae.

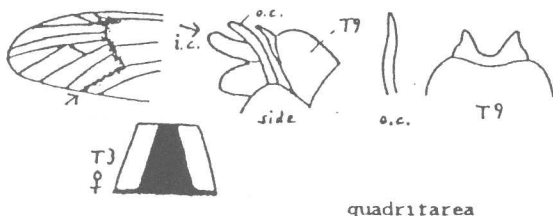


8

- Postnotum bald or pleurae without strong black markings (scurra)

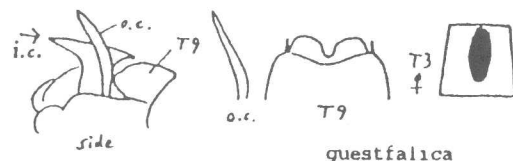
9

8. Postnotum with mainly pale hairs. Wing with dark seam across wings below stigma [strong to very faint]. Male inner clasper with long blunt posterior 'wings'. Female tergites with triangular median markings. Cerci blunt.



quadritarea

- Postnotum with mainly black hairs. Wings with only a dark stigma. Male inner clasper with long pointed posterior 'wings'. Female tergites with median spots. Cerci pointed.



guestfalica

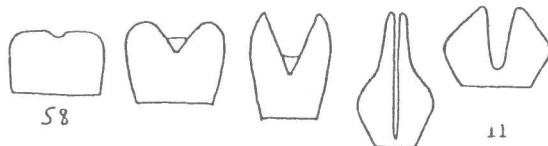
9. Males

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 plain 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.

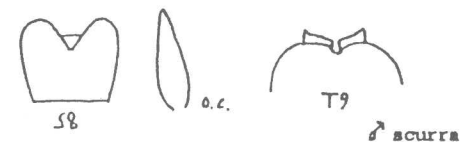


♂ anilis

- Sternite 8 strongly notched or cleft. Outer clasper elongate, but wide at base, often then abruptly narrow

12

12. Sternite 8 with strong shallow median notch. Outer clasper not particularly long or slender.



♂ scurra

- Sternite 8 deeply cleft. Outer clasper longer, very slender in apical part.



13

13. Flagellar segments only mildly knobbly. Sternite 8 bulbous at base and with a broad cleft. [rare]



♂ lunulicornis

- Most flagellar segments strongly knobbly. Sternite 8 either very elongate with narrow cleft, or with broad V-cleft.



14

14. Sternite 8 diamond-shape in ventral view, with long apical processes, and narrowly cleft to near base.



♂ dorsalis

- Sternite 8 more wedge-shaped, with deep V-cleft. [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. Praescutum on top with lateral stripes partly fused with median stripe. [otherwise similar to *appendiculata*; very rare]



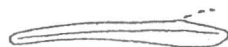
♂ sullingtonensis

- Praescutum with stripes completely separated. [keyed here for exceptional specimens with dark stigma]



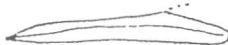
♂ appendiculata

18. Cerci blunt.



19

- Cerci pointed.



23

19. Side or praescutum with a dull matt black spot attached below anterior end of sub-lateral stripe



♀ anilis

- Sides of praescutum shining and without detached spot below sub-lateral stripe.



20

20. Lower part of pleurae 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 pleurae with dark spots between coxae [typical of genus]



21

20. 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. Flagellar segments long. [mainly sandy stream and river banks]



♀ dorsalis

- Antennae with 13 segments. Flagellar segments short. [rare, sand dunes]



♀ quadristriata

23. Praescutum at sides shining, with an isolated spot below the anterior end of the sub-lateral stripe [rarely this spot can link with the sublateral stripe or is very faint. Tergites quite elongate with somewhat triangular median markings. [rare]



♀ aculeata

- Praescutum with dull dark spot at side that is joined to the shining sub-lateral stripe. Tergites less elongate and usually with more parallel sided median markings.



24

24. Pleurae with mainly orange brown markings (any black marks ill-defined).

♀ cornicina

- Pleurae some with sharply defined black markings.

25

25. Praescutum on top with lateral stripes partly fused with median stripe. [otherwise similar to *appendiculata*; very rare]



♀ sullingtonensis

- Praescutum with stripes completely separated. [keyed here for exceptional specimens with dark stigma]



♀ appendiculata

#### Genus NICROTIPULA (nigra)

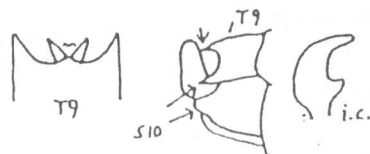
The single species is characteristically chocolate brown with plain brownish wings. There are no *Tipula* of this description with a hairy postnotum so *Nicrotipula* is readily recognised in both sexes.

#### Genus PRIONOCERA

There are three grey species, bearing a dark median stripe on the abdomen, and the wings are rather plain (apart from a weak whitish lunule below the stigma), and hence resembling *Tipula* (*Acutipula*) *luna*. The genus is distinct in that the flagellae are rather serrate and lack whorls or long bristles. The larvae are aquatic in pond margins, 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]



♂ turcica

- Tergite 9 with two or four shorter upturned processes, with a wide gap between those nearest the mid-line.



2

2. Tergite 9 with 4 small pointed projections, plus a rectangular median plate. [Inner clasper bulbous at base before slender beak] [rare]



♂ subsericornis

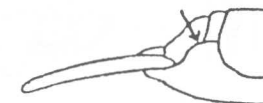
- Tergite 9 with only 2 pointed processes (but take care not to add features on sternite 10); the hind margin of the tergite comes to a median point (as in *turcica*) but the splayed projections are much further apart. [Inner clasper long tapering] [rare]



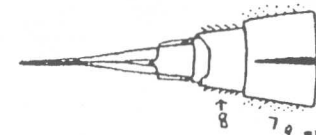
♂ pubescens

#### Key to females

Note that sternite 8 has a large dorsal flap, a useful cross-check in the antennae are missing. No *Tipula* of similar colour have this flap.



1. Tergite 8 with black hairs at sides (view from above and take care of lighting - pale hairs can look black at some angles). [rare]



♀ subsericornis

- Tergites 8 with pale hairs at sides. (view from above and take care of lighting - black hairs can look pale at some angles).

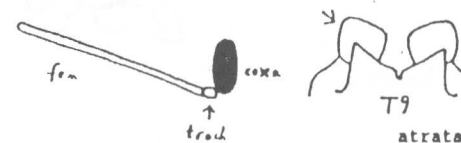
♀ pubescens/turcica

Little material of *pubescens* is available. The wings are weakly tinged. *P. turcica* is variable but usually has much more strongly tinged wings. For the present it is best to rely on males for this species pair and to keep vouchers if only females can be obtained at a locality.

#### Genus TANYPTERA

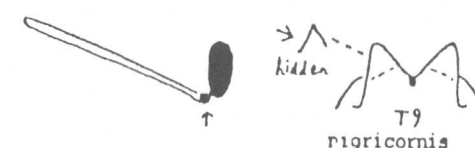
The two species have shining black bodies, with or without some red on the abdomen. The long saber-like ovipositor looks fearsome on these large ichneumon-wasp mimics. These are scarce species that breed in dead wood.

1. Trochanters orange. Male tergite 9 underlain by large ridges. Female tergites 1-3 usually mainly red.



atrata

- Trochanters black. Male tergite 9 underlain by small pointed hidden processes. Female tergites 1-2 usually mainly red.



nigricornis