



Beginner's guide to identifying British Tenthredo

by Krisztina Fekete



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Identifying Tenthredo

Tenthredo amoena

Tenthredo arcuata

Tenthredo atra

Tenthredo baetica dominiquei

Tenthredo balteata

Tenthredo brevicornis

Tenthredo colon

Tenthredo distinguenda

Tenthredo fagi

Tenthredo ferruginea

Tenthredo ignobilis

Tenthredo livida

Tenthredo maculata

Tenthredo mandibularis

Tenthredo mesomela

Tenthredo mioceras

Tenthredo moniliata

Tenthredo neobesa

Tenthredo notha

Tenthredo obsoleta

Tenthredo olivacea

Tenthredo omissa

Tenthredo schaefferi

Tenthredo scrophulariae

Tenthredo semicolon

Tenthredo temula

Tenthredo thompsoni

Tenthredo velox

Tenthredo vespa

Tenthredo zona

References

Acknowledgements

Useful links



The purpose of this pictorial identification guide was to support and complement Robert B. Benson's (1952) *Handbooks for the Identification of British Insects – Symphyta (Tenthredo)* key. The detailed images of specific identification features will help those, who are interested in entomology, keen to improve their identification skills and eager to generate more data of this under-recorded group.

The distribution maps were downloaded from the National Biodiversity Network website last year and they provide an indication where each species could possibly be found.

This document is also intended to become a continuously developing guide with updated distribution maps, added features and other information.

Fossils from the late or Middle Triassic Period have well-preserved features and have already revealed much of the Hymenopteran history. It was the during Cretaceous period when new Hymenopteran families, such as Cephidae and Tenthredinidae, first appeared.

Sawflies are considered to be one of the most primitive groups of Hymenoptera. The suborder name '*Symphyta*' was derived from the Greek word '*symphyton*' which translates as 'grown together'. A clear indication that this group possesses an entire abdomen as opposed to the wasp-waist of the Apocrita group. (Merriam-Webster).

Prior to the 18th century scientists were not particularly interested in studying Symphytan groups.

What is a sawfly?



The entire abdomen of Symphyta – as opposed to the wasp-waisted Apocrita – is the most characteristic feature of this group.

Sawflies have two pairs of wings with wing venation that often resembles ancestral forms.

Cenchrus (plural cenchri) is another specialised anatomical feature of all adult sawflies (except the family Cephidae). These are small blister-like lobes on the metanotum which anchor the forewing in place when the insect is at rest (Wright, 1990).

Female sawflies possess “saws” that are used to cut open plant tissue for ovipositing.



The 'original' genus *Tenthredo* described by Linnaeus (1758) contain several species which are now placed in different families of the Symphyta. Early descriptions were short, without illustrations and based on colour variations.

Tenthredinidae displays a huge variety of forms and habits.

Many Tenthredinids have two distinct emergence types, one in early spring and one later in the season.

The Hymenoptera order is divided into two taxonomic suborders the Symphyta and Apocrita. The Symphyta consists of about 8000 species. The Symphytan group is considered to have evolved first, from which the Apocritan group arose later (Viitasaari, 2002).

Tenthredinid sawflies appear to be in a process of active evolution and there is much that we don't know about their speciation yet. (Viitasaari, 2002).

Insects of the order Hymenoptera are holometabolous – they go through metamorphic stages egg, larva, pupa and adult. The larval and adult stages differ greatly from each other, both in habits and anatomical structure.

Mating

Virgin females produce sexual pheromones which attract males. Male sawflies have pheromone receptors located in their antennae (Casida et al. 1976). Mated females become unattractive to males within 10 minutes of mating (Borden et al. 1978).

Few sawfly species exhibit territorial behaviour (except some cimbicid males). Cameron described 2 *Trichiosoma lucorum* flying at each other for 10 minutes trying to maintain their chosen territory (Viitasaari, 2002).

Male Tenthredinid sawflies are strophandrious which means they have their genitalia rotated 180°, therefore mating happens by adopting the end-to-end posture. Copulation may be short or can last over 10 minutes. Some females of certain species may copulate between laying their eggs (Chrystal & Skinner, 1932).

Oviposition

Primitive/early female sawflies are thought to have oviposited directly onto substrates. The method of insert eggs into plant tissue presumably evolved in order to protect them against predators or desiccation (Viitasaari, 2002).

Before ovipositing, the female carefully examines the plant surface with receptors on her antennae, mouthparts and apex of the abdomen. Most sawfly species use their sawing ovipositor to lay their eggs inside the tissues of the host plant (Viitasaari, 2002). Some sawfly species however, leave their eggs almost entirely on the plant surface. A few *Tenthredo* (subgenera *Tenthredella* and *Olivacedo*) were observed to oviposit onto flower petals (Verzhutskij, 1973). When a suitable spot is chosen the ovipositing guide is pressed against the plant surface and the vibration of the lancets cuts open the plant tissue. Then the female turns her saw sideways to create an egg-pocket. The number of eggs laid can greatly differ; it all depends on the species in question. It ranges somewhere between 10-1000 eggs per female (Viitasaari, 2002).

Egg stage

The egg stage of Symphyta is generally short but temperature and humidity will influence the length of this period. Incubation period is usually between 4-37 days in various Symphytan groups (Miles et al, 1933, Adam 1973). On the other hand, the small Tenthredinid genus *Apethymus* overwinters as eggs (segmented embryo surrounded by chorion) (Bryggider, 1952 in Viitasaari, 2002).

Larval stage → Prepupal stage → Pupal stage

Sawfly larvae can resemble the caterpillars of moths and butterflies. One major difference is that sawfly larvae possess 6 or more pairs of prolegs and only one pair of eyes as opposed to butterfly and moth larvae with 5 pairs of prolegs and several pairs of eyes.

Some larvae are polyphagous others are rather specialised in their host plant preferences (Liston, 1995 in Viitasaari, 2002) Sawfly larvae are known to exhibit diapause that are genetically programmed and brought on by environmental cues to support survival during unfavourable periods (Wagner & Raffa). The duration of larval feeding is genetically programmed, however temperature can alter this. In order that the larva can grow it has to shed its cuticle, which is the moulting process. Female larvae usually go through one extra moult than male ones and the average numbers of moults are between 4 and 8, however 12 have also been described (Madden, 1981 in Viitasaari, 2002).

When the last instar larva stops feeding, it shrinks longitudinally and in many cases changes its colour. After that it enters the prepupal phases. The priority of the prepupal larvae is to find a safe pupation site; this can be in the soil, underneath moss cover, in rotten wood or a cocoon. Some groups of Tenthredinidae use their saliva to construct a soil chamber (Pschorn-Walcher, 1982 in Viitasaari, 2002).

After overwintering as a prepupa, most sawflies enter the early stages of a pharate pupa. The final pupal stage is short, usually 1-2 weeks. The pupal stages of sawflies are usually inactive (Viitasaari, 2002).

The diet of freshly emerged sawflies could consist of nectar, pollen, sap, honeydew and stamens of plants and smaller insects.

Carnivory is especially characteristic in *Tenthredo*. Adults of many *Tenthredo* species are voracious predators of insects, especially sub-genus *Tenthredella* (*fagi*, *atra*, *velox*, *moniliata*, *mandibularis*, *ferruginea*, *balteata*, *colon*, *livida*). As an example *T. mesomela* is known to consume other smaller Tenthredinids, *T. maculata* attacks passing insects, *T. arcuata* predaes small insects visiting flowers, and other *Tenthredo* species feeds on cuckoo spit nymphs and spittle bugs.

In the UK most sawflies emerge during May – June, however there are exceptions. The life expectancy of adult sawflies is between 2-5 weeks maximum. Symphytans are usually active during the day however they can be attracted to light traps too. Males generally emerge earlier than females.

In some species mating males display swarming behaviour around either the host plant or hilltops, apparently ignoring females.

We can find puzzling anomalies in the sawfly-plant relationships around the globe; e.g. complete lack of Tenthredinid sawflies on the pines in Europe. (Viitasaari, 2002).

Habitat

Representatives of *Tenthredo* species can often be found on the flowers of umbellifers. Damp meadows, river and lake shores with rich vegetation, willows are also potential collecting sites.

Enemies

All stage of sawflies can be attacked by various predators (birds, small mammals – and arthropod predators). Larval predation is not significant in terms of sawfly population dynamics (Olofsson, 1987). Cocoon predation, on the other hand can be the determination factor on outbreak species (Hanski, 1987, Olofsson, 1987 in Viitasaari, 2002).

Parasitoids of sawfly larvae belong mostly to the Ichneumonid wasps and Tachinid flies. One of the most important hosts for Ichneumons are the Symphyta groups. Ichneumons are 60% of sawfly parasitoids; amongst them there are tribes that specialise on attacking Symphyta eg. Rhyssini (on wood wasps), Tryphonini (on Dolerini), Exenterini (on Diprionidae), Collyriinae (on Cephidae)(Viitasaari, 2002). With regards to Tachinid flies, 14 of the 241 British species are known to attack symphytan larvae (Belshaw, 1993 in Viitasaari, 2002).

Importance of Symphyta

Most Symphytan species are known to cause injuries to plant species to various extents, either in larval form or as adult feeding. The more serious damage is done by larval feeding but adult feeding can also make plants weaker and more susceptible to diseases (Viitasaari, 2002). Most outbreak sawfly species are from the family Diprionidae. Sawfly damage can be severe and significant in forestry, not as much in agriculture.

Adult Symphytans can be pollinators and a few species have been used as potential agents for biological control of weeds, however no *Tenthredo* spp. has been utilised this way yet.

Collecting

Hand-netting, sweeping and using beating tray is an easy ways to obtain many specimen. Sawflies are usually active before noon and tend to hide when humidity levels are low. Sunny and calm weather is ideal for netting. Sawflies can be attracted to light traps too especially when daytime temperature has been high (Viitasaari, 2002). The season for adults begins early spring and ends in autumn but the peak is May-June. Some *Tenthredo* spp. can be in flight later in the summer too.

Tenthredo is the largest sawfly genus, with over 700 described species from all over the world.

30 species of Tenthredo can be found in Britain which is about half of the 65 known European Tenthredo species.

In the past the Tenthredo genus has been divided into long-horned (Tenthredella) and short-horned group (Tenthredo) but this division has proved to be not suitable to describe Tenthredo species from around the world.

Most Tenthredo sawflies are fairly big, between 10-15 mm in length.

Species of this group display a variety of colour combinations. Many of them are typically yellow

and black. There are a few which are black and red and others are black and green (resembling Rhogogaster spp.)

Identification of male and female Symphyta might prove to be difficult in many cases as males can display very different appearances than females of the same species.

Populations living under varying environmental conditions might be markedly distinct. Specimens of various ages may be visibly different. In addition to these, sawfly hybridization has been witnessed in laboratories and crossbreeding of 2 species could produce a 3rd, entirely different species. (Viitasaari, 2002).

Alutaceous – having a texture like that of a leather

Anterior – at the front

Apical – the tip, forming an apex

Apex (pl. Apices) – highest point, tip or top

Basal – nearer to base, centre of body

Basitarsus – first of five tarsal segments joined to tibia

Carina – elevated ridge

Cenchrus (pl. Cenchri) – small, blister-like lobes help to anchor the wings when the insect is at rest

Clypeus – a broad plate on the anterior median aspect of an insect's head, confined by the mandibles and above the labrum

Copiously – in an extensive and wide-ranging way

Costa – leading edge or vein of the forewing

Coriaceous – having a leathery texture, tough

Crest – prominence or protrusion above the antennae

Dorsal – refers to the back, the upper part of the body, from above

Femur – third leg segment between trochanter and tibia

Flagellum – anatomical part of insect antenna, made up of single units (flagellomere)

Fuscous – dark, sombre in colour

Impunctate – lacking punctures, smooth textured

Infusate – darkened with a brownish tinge

Labrum – sometimes called the “upper lip”

Lateral – towards the sides

Malar space – the space between the anterior margin of eye and the base of mandible

Mandible – pair of jaws

Medial – situated in the middle

Median vitta – dark marks on the middle of abdomen

Medius – structure that is in a midway position, in the middle

Mesonotum – the dorsal portion of the mesothorax

Metapleuron – lateral wall of metathorax of the insect

Obsolete – rudimentary, less developed

Occipital – situated near at the back of the head

Ocellus – type of simple eye or eyespot in invertebrates

Piceous – glossy brownish-black in colour

Posterior – near at the rear end

Pubescence – covered with fine layer of short hairs or down

Pronotum – prominent, plate-like structure covering the dorsal surface of thorax in insects

Scape – basal segment of insect antenna

Scutellum – a posterior portion of a mesonotum, typically forming a posteriorly-pointing triangle at the base of wings

Setiform – bristle-like, shaped like seta

Sternite – sclerotised plate forming the ventral part of abdomen

Stigma – prominent cell on the forewing

Subclavate – club-shaped

Tarsus – final segment in the insect leg

Tarsomere – tarsus consists of five sections called tarsomeres

Tegula – small, scale-like lobe at the base of the forewing

Tergite – the dorsal part of the insect abdomen

Tibia – the fourth segment of the insect leg, between the femur and the tarsus

Trochanter – the second segment of the insect leg, between the coxa and femur

Ventral – relating to the underside of the organism



Visit promising habitats preferred by Tenthredo – search for larvae and adults on vegetation



Purchase a microscope or book an appointment to use one at the Angela Marmont Centre – Natural History Museum



Attend sawfly identification workshops (BENHS) to improve ID skills



Send records to iRecord or Local Biological Record Centres



Take detailed photographs from various angles



Practice identification by using Benson's key



Join special interest groups – Sawflies of Britain and Ireland Facebook Group



Have fun and spread the word about sawflies!



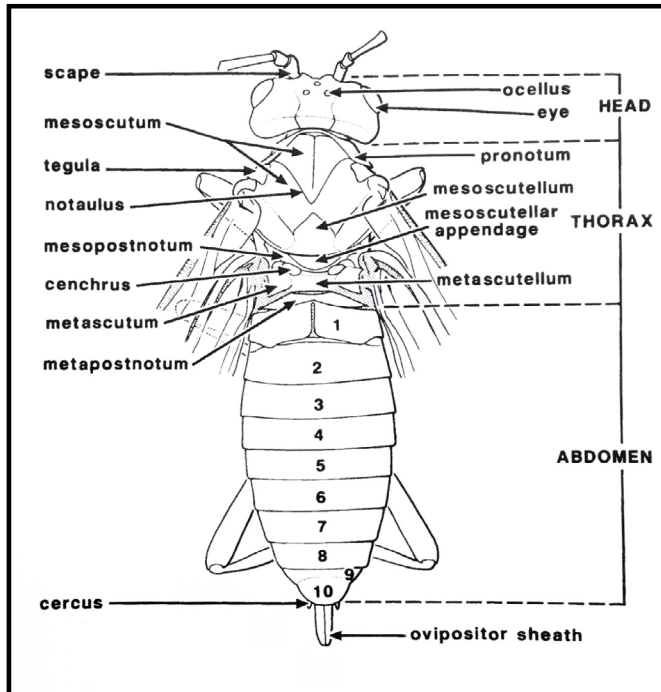
Collect specimens – permissions must be granted from landowners



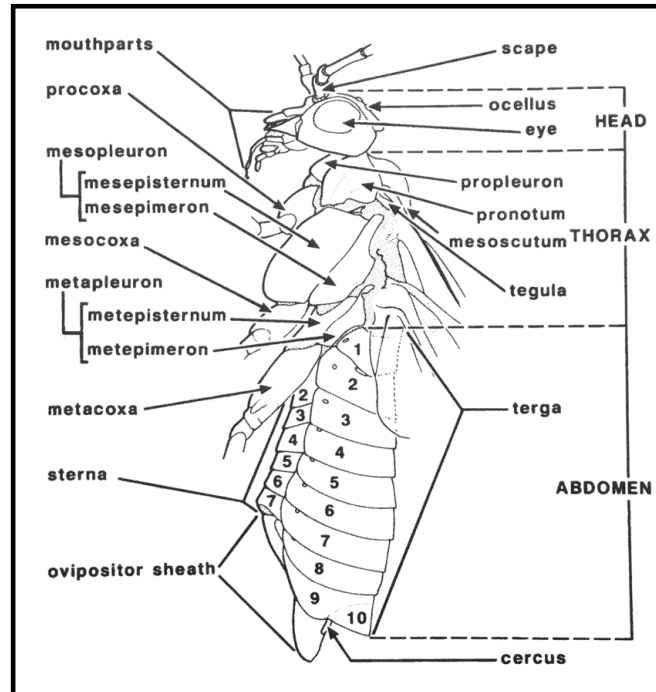
Use Museum reference collections to compare specimens and identification features



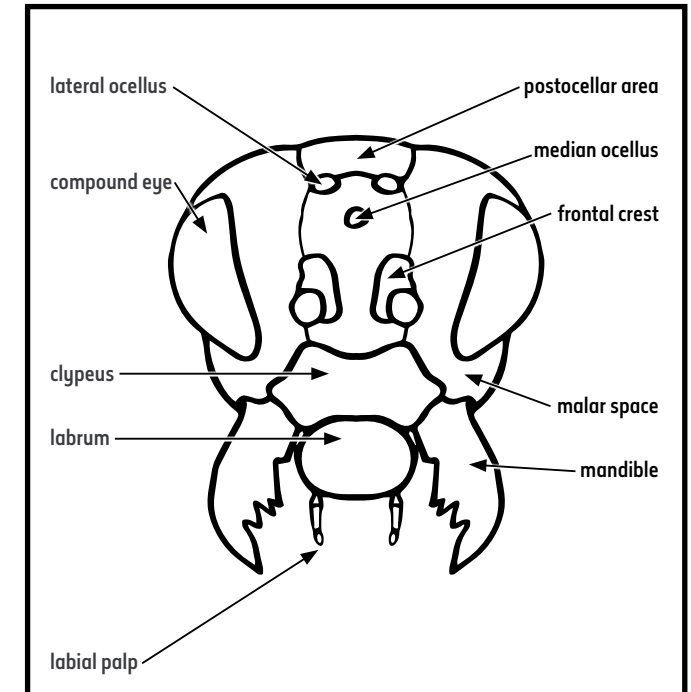
Record everything – data and metadata are both very important



Use of illustration is courtesy of
Goulet, H., and Huber, J. T. (1993) from the *Hymenoptera of the world*



Use of illustration is courtesy of
Goulet, H., and Huber, J. T. (1993) from the *Hymenoptera of the world*





Antennae 9-segmented, either filiform or sub-clavate.



First abdominal tergite split along the middle (A).



Carina is fully developed around the back of the head (B).



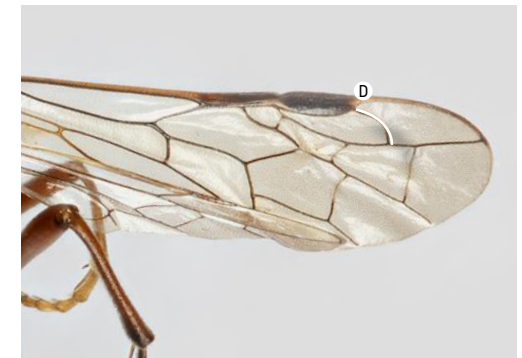
Hind femur (F) shorter than hind tibia (T).
Hind tibia with two long spurs of roughly equal size (C).



Hind edge of pronotum (excluding tegulae) is obviously not straight.



Antenna emerge from head at a point above the lower eye margin and clypeus, on the anterior aspect of head.



Vein 2R present in the forewing (D).



Hind tibia (A) reddish-brown tipped apically in ♀.



Larger species; 9-11 mm.



Stigma (B) reddish-brown with yellowish base and costa (C) also reddish-brown.



Head above shining with sparse punctures on the front and inner orbits (D). Head never strongly widened behind eyes (F). Post-occipital carina (E) obsolete behind post-ocular area.



5th tergite (G) yellow at base but black at apex. Antenna subclavate (H). 1st antennal segment entirely yellow (I). Tegula only margined with yellow in front (J).

Larval hostplant:
Hypericum maculatum,
H. perforatum

**UK distribution of
Tenthredo amoena:** mainly
on chalk downs and heaths.

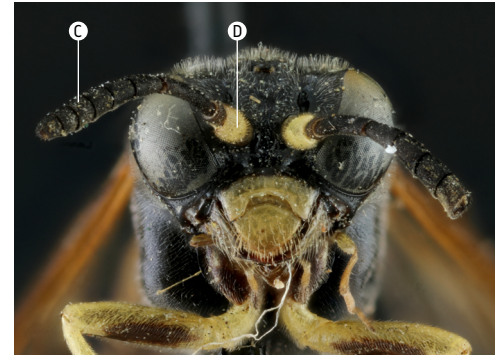




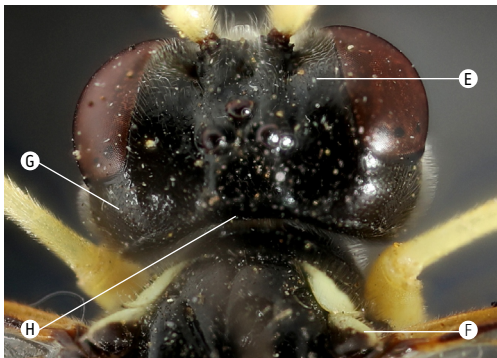
Hind tibia (A) black-tipped apically in ♂.



Mesepisternum with shining interspaces between fine but shallow punctures (B).



Antenna subclavate (C). 1st antennal segment yellow (D).



Head above shining with sparse punctures on the front and inner orbits (E). Tegula only margined with yellow in front (F). Head never strongly widened behind the eyes (G). Post-occipital carina obsolete behind post-ocular area (H).



Apex of costa (J) reddish-brown and stigma (I) also reddish-brown with yellowish base.

Larval hostplant:
Hypericum maculatum,
H. perforatum

UK distribution of
Tenthredo amoena: mainly
on chalk downs and heaths.





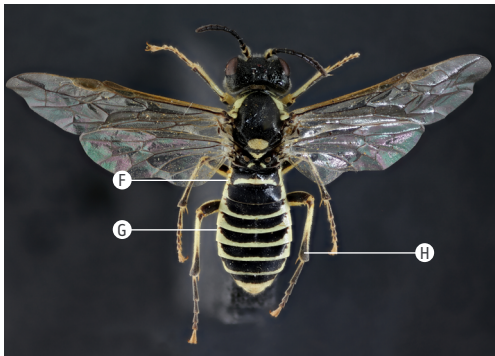
Antenna (A) subclavate – sub-apical segments almost as broad as the scape.



Forewing uniformly hyaline or yellowish hyaline. Posterior half of sub-costa and medius piceous (B).



Head (C) and thorax (D) more densely punctured or coarsely coriaceous, scarcely shining. Post-occipital carina (E).



First abdominal tergite of ♀ with a yellow band constructed laterally (F). Yellow bands on hind margins of tergites broadening laterally (G). Hind tibia black at apex (H).



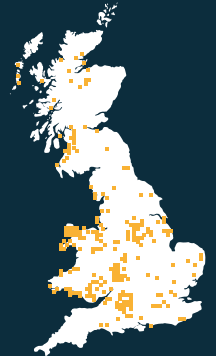
Flagellum of antenna entirely black but basal antennal segment in ♀ usually marked with yellow (I). Pale apical margins to black sternites in ♀, entirely yellow underside in ♂ (J).

Arcuata-complex – only females of this complex are separable into species!

Additional ID feature to examine is the ‘saw’ which has blunt and rounded ventral teeth.

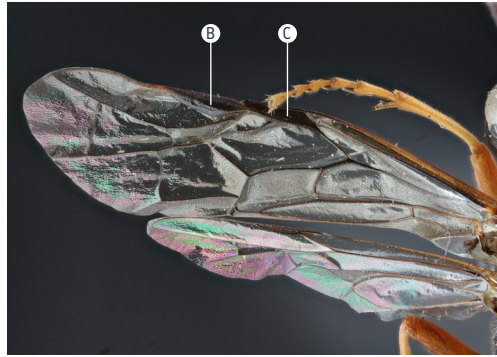
Larval hostplant:
Trifolium repens

UK distribution of
Tenthredo arcuata

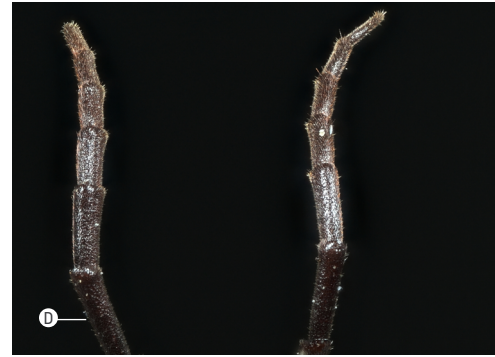




Metapleura entirely black or with a white mark (A).



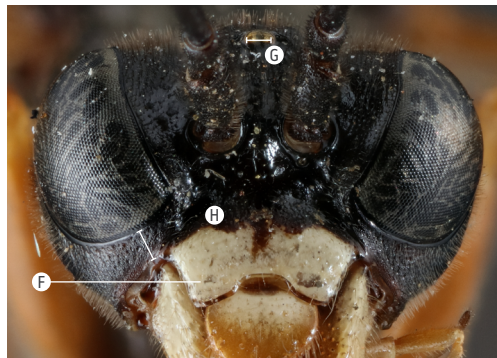
Stigma (B) and apex of costa (C) of fore wings black.



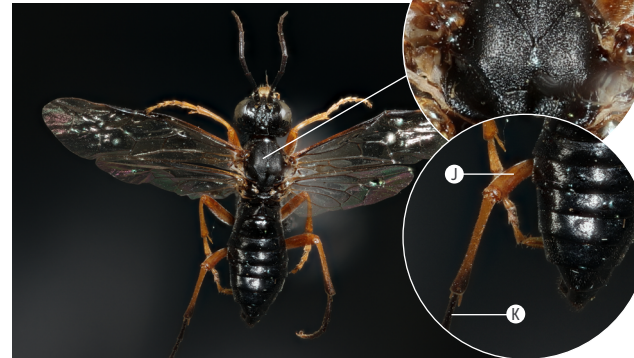
Antenna (D) entirely black and setiform.



Head shining with sparser, shallow punctures (E).



Clypeus, labrum and most of the mandible white (F).
Malar space (H) longer than the diameter of front ocellus (G).

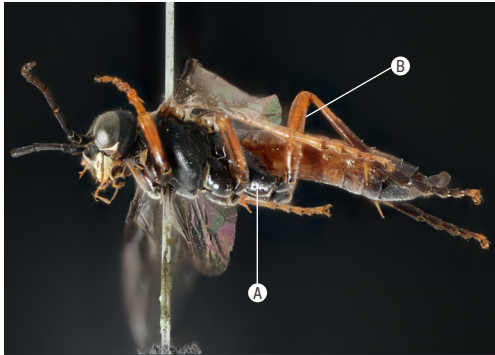


Mesonotum dull with rough surface. Size: 9-12 mm (I).
Abdomen without red band in ♀. Hind femur (J) mostly red (occasionally yellow). Apices of hind tibiae and tarsi (K) black.

Larval hostplant:
Lamium, Plantago, Vicia,
Ranunculus, Scabiosa, Brassica,
Solanum, Mentha

**UK distribution of
*Tenthredo atra***





Metapleura (A) entirely black or with white mark.
Hind femur (B) mostly red or occasionally yellow.



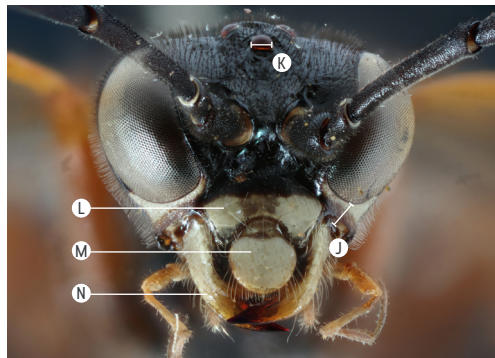
Head shining with sparser sculpture (D).



Apices of hind tibiae (E) and tarsi (F) are black.



Stigma (G) and apex of costa (H) of forewings black. Tergites 2-6 red in males (I).



Malar space (J) longer than the diameter of front ocellus (K)
Clypeus (L), labrum (M) and most of the mandibles (N)
are white.



Mesonotum dull with rough surface (O).

Larval hostplant:

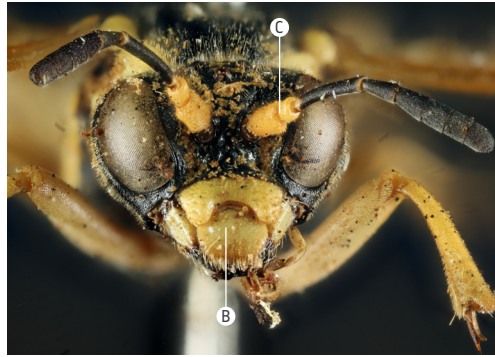
Lamium, Plantago, Vicia,
Ranunculus, Scabiosa, Brassica,
Solanum, Mentha

UK distribution of *Tenthredo atra*





Size: 10-12 mm. Mesepisternum (A) marked with yellow fleck.



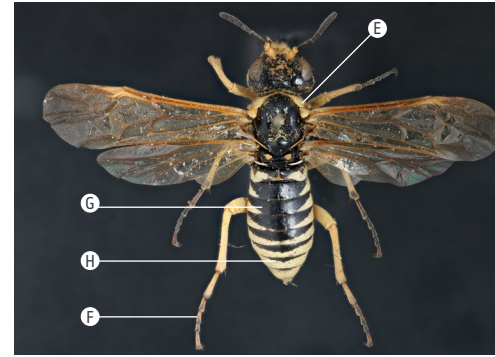
Labrum (B), clypeus and 2 basal segments (C) of antennae are yellow.



Sternites (D) are black with thin, pale apical margins.



Wings are yellowish with yellow stigma and venation (I).



Hind angle of pronotum and tegulae are yellow (E). Apex of hind tibiae and tarsi are reddish brown (F). Abdomen is black with apical-lateral yellow flecks on the 4 basal tergites (G). Entire apical margins on the 5th and 6th tergites are yellow and the whole of the following tergites (H).

The subspecies *baetica dominiquei* (Konow, 1894, *Allantus*) is represented in Britain; this taxon was placed for a time by Benson as a subspecies of the more continental *T. flaveola* (Gmelin, 1790), but his opinion is not supported by data on distribution and morphology.

Lacourt (1999) treated *T. dominiquei* as a northern subspecies of *T. baetica* (nominat subspecies confined to Spain and Portugal). The latter treatment is supported by results of COI barcoding (unpublished)(Liston et al., 2014). Historical records from London, Surrey, Essex and Oxford

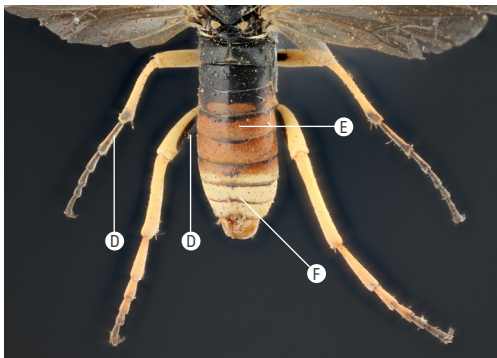
Foodplant:
Brassica oleracea,
Sinapis alba and
Raphanus raphanistrum



Wings are yellowish with yellow stigma and venation (A).



Hind angle of pronotum (B) and tegulae (C) are yellow.



Legs are yellow except coxae, inner side of femora, apices of fore and middle tibiae and tarsus (D). Red is the apex of 3rd, entire 4th, 5th tergites and top of 6th tergite (E). From the apex of 6th tergite all the tergites are yellow (F).



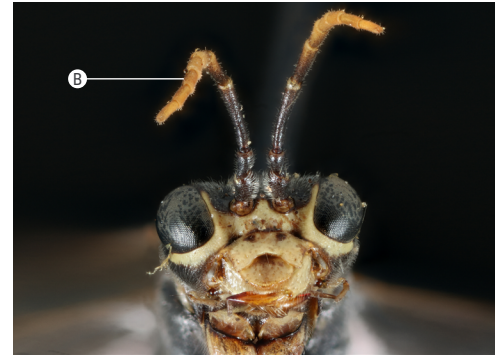
Size: 10-12 mm. Labrum, clypeus (G) and 2 basal segments of antennae (H) are yellow.



Smaller species: 9-10 mm.



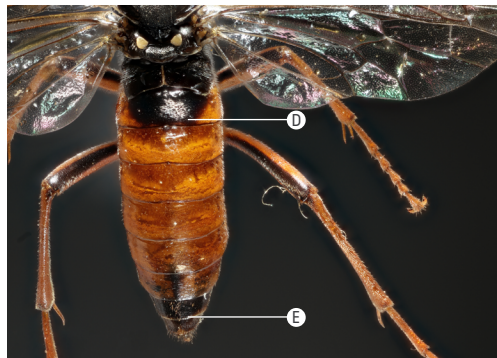
Underside of thorax black (A).



Antenna (B) partly pale, setiform.



Stigma of forewing unicolorous, usually black or piceous (C).



Abdomen black at the base (D) and apex (E) with varying amount of red on middle segments.



Head above clearly punctured with bronze sheen between punctures (F).

Larval hostplant:
Pteridium aquilinum,
Hypericum,
Sorbus aucuparia

**UK distribution of
*Tenthredo balteata***





Smaller species : 9-10 mm.



Stigma of forewing (A) unicolorous, usually black or piceous.



Underside of thorax (B) black. Antenna (C) partly pale, setiform.



Only 1st (D) and last (E) abdominal segments are black in males.

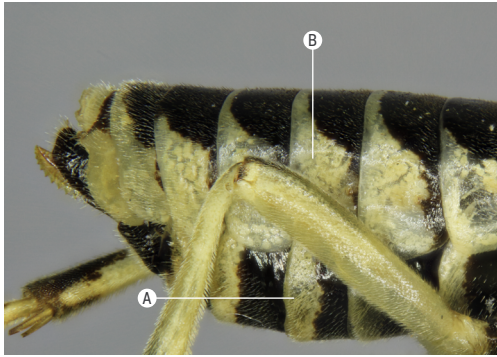


Head above clearly punctured with bronze sheen between punctures (F).

Larval hostplant:
Pteridium aquilinum,
Hypericum,
Sorbus aucuparia

**UK distribution of
*Tenthredo balteata***

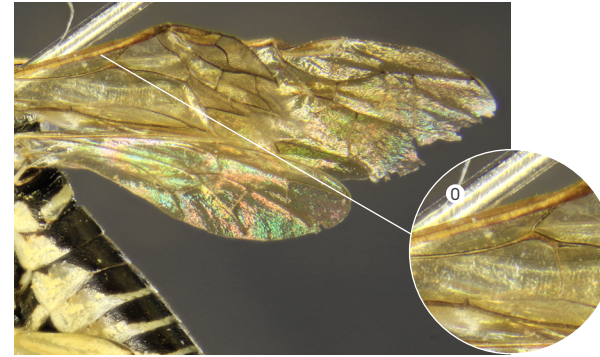




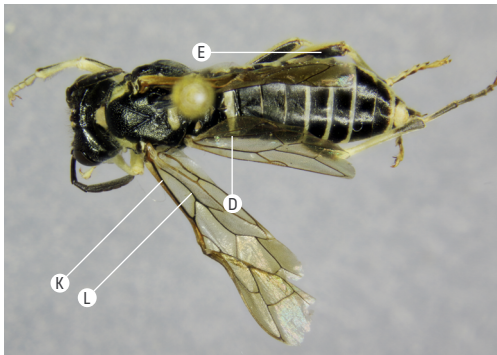
Yellow bands on hind margins of tergites (B) broadening laterally. Pale apical margins to black sternites in ♀, entirely yellow underside in ♂ (A).



Hind tibia black at apex (C). Additional ID feature to separate *T. brevicornis* from *T. arcuata* – Female saw with sharp ventral teeth.



Forewing uniformly hyaline or yellowish-hyaline (O).



Posterior half of sub-costa (K) and medius (L) piceous. 1st abdominal tergite (D) with yellow band which is constricted laterally. In the commonest British form the femora are all lined behind with black (E).



Basal antennal segment (F) usually black, rarely flecked with yellow.



Antenna subclavate, flagellum entirely black (G). Head never strongly widened behind eyes. Head above coarsely coriaceous, shining between punctures (H, I). Post-occipital carina well-developed (J).

Arcuata-complex – only females of this complex are separable into species!



Antenna setiform, black with only 6-7-or 8th segments white (A).



Metapleura with white fleck on each side.



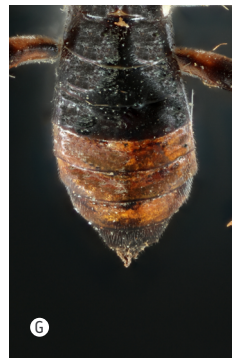
Head shining above without surface sculpture (B).



Tegula more or less red (C). Scutellum black with coarse punctures in the middle (D).



Stigma (E) unicolorous, costa of forewing (F) yellowish brown. Abdomen with red girdle covering at least tergites 5-6 (sometimes 3-9) (G).

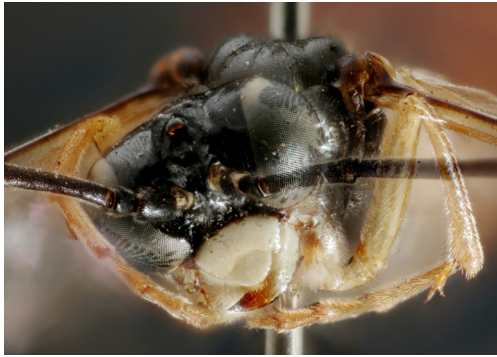


First tergite of abdomen with white fleck (H).

Larval hostplant:
Epilobium, Salix, Pteridium,
Fuchsia, Circaea,
Chamaenerion angustifolium

**UK distribution of
Tenthredo colon**





Size: 10-11 mm.



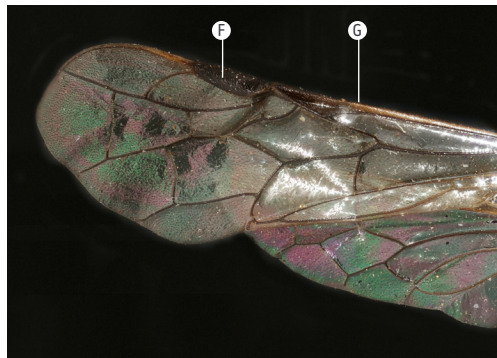
Metapleura with white fleck on each side (A).



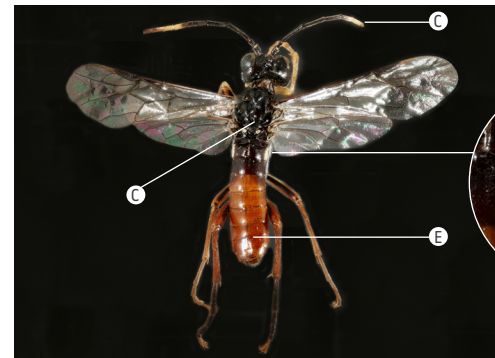
Top of head shining without surface sculpture (B).



Tegula more or less red (H).



Stigma of forewing (F) unicolorous Costa of forewing (G) yellowish brown.



Antenna setiform; 6-7-8th segments are white (C). Scutellum black with coarse punctures and it is never marked with white (C). First tergite of abdomen with white fleck (D). Abdomen of ♂ red or reddish brown (E).

Larval hostplant:
Epilobium, Salix, Pteridium,
Fuchsia, Circaea,
Chamaenerion angustifolium

**UK distribution of
Tenthredo colon**





Smaller species. Size 8.5-9.5 mm.



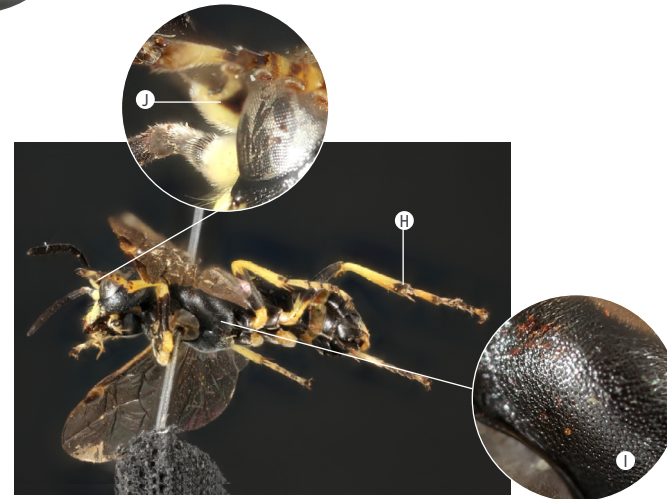
Antenna subclavate (A). Tegula entirely yellow (B). Abdomen black with one or more pale yellow bands (C). Females with 5th tergite entirely yellow.



Head above shining and sparsely punctured on the front and inner orbits (D). Head is never strongly widened behind the eyes (E). Post-occipital carina (K) obsolete behind post-ocellar area.



Apex of costa (F) and stigma (G) piceous with yellow base.



Hind tibia black tipped apically (H). Mesepisternum dull with fine, close punctures (I). 1st antennal segment with black fleck on the outer side (J).

Larval hostplant:
unknown;
mostly on chalk

UK distribution of
Tenthredo distinguenda



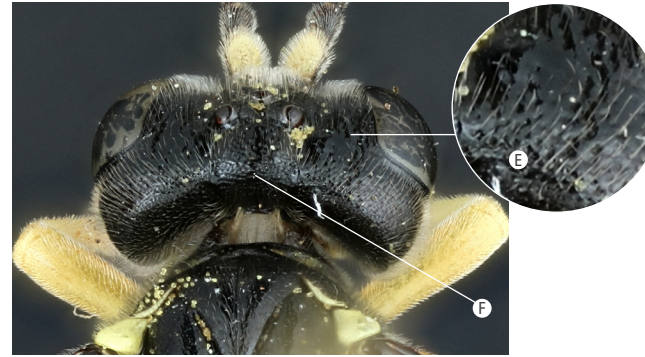
Tenthredo distinguenda ♂



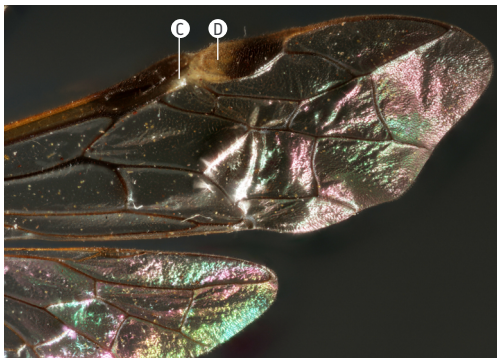
Smaller species, size 8.5-9.5 mm. Antenna subclavate (A).



Head is never strongly widened behind the eyes. Tegula entirely yellow (B).



Head shining with sparse punctures on the frons and inner orbits (E). Post-occipital carina obsolete behind post-ocellar area (F).



Apex of costa (C) and stigma (D) piceous with yellow base.



Hind tibiae black-tipped apically (G). 1st antennal segment with black fleck on outer side (H).

Larval hostplant:
unknown;
mostly on chalk

UK distribution of
Tenthredo distinguenda

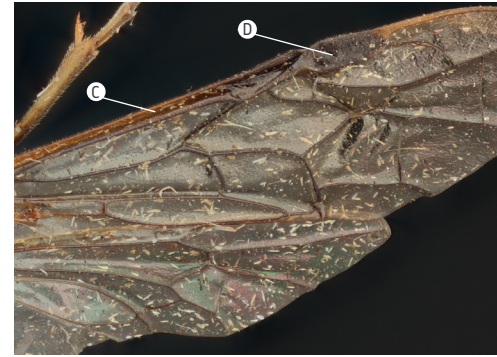




Metapleura with white fleck on each side (A).



Antenna setiform, black, only 6-7 or 8th segments white (B).



Costa of forewing (C) yellowish-brown, stigma (D) unicolorous.



Larger species, size of female 12-15 mm. Abdomen entirely black except the white flecks on the side of tergite 1 (E).



Scutellum marked with white, almost hemispherical, without definite punctures in the middle.



Head shining without definite punctures in the middle (I). Tegula black (J).

Larval hostplant:
Sorbus aucuparia, Corylus,
Pteridium aquilinum, Rubus.

T. fagi is scarce in the UK, mostly
from South and East of England.





Abdomen in males are yellowish-brown (A).
Size of males: 11-13 mm.



Costa of forewing (B) yellowish-brown, stigma (C) unicolorous.



Tegula black (D).



Whitish marked mesosternum (O). Antennae (E) setiform,
black with segments 6-7 and/or 8 white.



1st tergite of abdomen with white fleck on each side (F).
Scutellum marked with white, except in a few ♂ almost
hemispherical, with no definite punctures in the middle (G).



Head shining without definite punctures in the middle (H).

Larval hostplant:
Sorbus aucuparia, *Corylus*,
Pteridium aquilinum, *Rubus*.

T. fagi is scarce in the UK, mostly
from South and East of England.





Larger species, size 10-13 mm.



Underside of thorax reddish-yellow but could be entirely black too (A).



Antenna setiform, long and partly pale (B). Abdomen red or reddish-yellow with 1st and/or 2nd segments blackened (C).



Stigma of forewing unicolorous, yellowish-brown (D).



Head above clearly punctured (E).

Larval hostplant:
Salix, Alnus, Filipendula,
Rubus, Prunus, Aspidium,
Pteridium, Sorbus, Atropa.

UK distribution map of
Tenthredo ferruginea

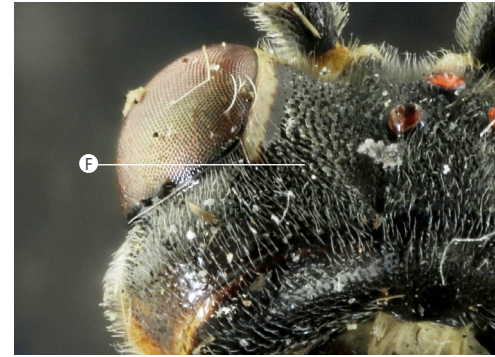




Antennae setiform, partially pale (E).



Abdomen red or reddish yellow with 1st and often 2nd tergite blackened (A).



Top of head is clearly punctured with bronze sheen between the punctures (F).



Underside of thorax usually reddish-yellow but in darker forms might be almost black (B).



Stigma of forewing (C) unicolorous, yellowish-brown.

Larval hostplant:

Salix, Alnus, Filipendula,
Rubus, Prunus, Aspidium,
Pteridium, Sorbus, Atropa.

UK distribution map of *Tenthredo ferruginea*





Photo: Sample ID - BC ZSM HYM 11149 by SNSB, Zoologische Staatssammlung Meunchen is licenced under CC-BY-NC-SA creativecommons.org/licenses/by-nc-sa/3.0/



Photo: Sample ID - BC ZSM HYM 11152 by SNSB, Zoologische Staatssammlung Meunchen is licenced under CC-BY-NC-SA creativecommons.org/licenses/by-nc-sa/3.0/

Larval hostplant:
Sedum telephium and
possibly Sedum rosea .

Recent addition to the UK Symphyta list.

Specimens were collected from Scotland in 2010. The species possesses a combination of colour characters that prevent it from running in the key by Benson (1952). It therefore seems that Benson had not seen British specimens of *T. ignobilis*, until Chevin (1974) raised it from synonymy. It was long treated as a colour polymorphism of *T. atra* (Liston et al., 2012).



Antennae setiform, at least partially pale.



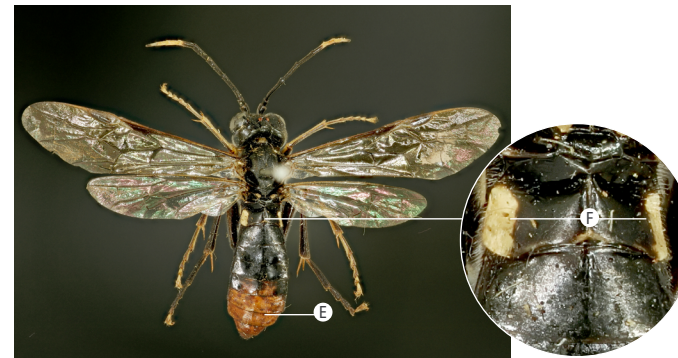
Top of head almost impunctate (B) and contracted behind the eyes (C).



Large, common species, size 12-15mm.



Stigma (D) bicolorous, the apical two-thirds being piceous or brown and the basal one third yellowish-white.



Abdomen is either entirely black or with apex of abdomen red up to the 5th apical segment (E). White fleck on both sides of the 1st tergite (F).

Larval hostplant:
Salix, Alnus, Filipendula,
Rubus, Prunus, Aspidium,
Pteridium, Sorbus, Atropa.

**UK distribution map of
*Tenthredo livida***





Antennae (A) setiform, at least partially pale.



Top of head almost impunctate (C) and contracted behind the eyes (D).



Abdomen of males are very variable of this species. Basal tergites are usually black, the middle tergites black at the sides but yellowish in the middle and the apical tergites are red.



Large species, size 12-15mm.



Stigma bicolorous, the apical two-thirds being piceous or brown and the basal one-third yellowish-white.

Larval hostplant:
Viburnum opalus, Rosa, Salix,
Corylus, Sorbus, Lonicera,
Epilobium, Pteridium,
Plantago, Arctium, Carpinus,
Fraxinus, Lamium, Melissa,
Athyrium, Symphoricarpos.

**UK distribution map of
*Tenthredo livida***

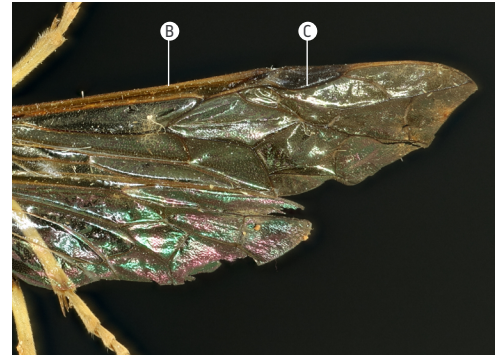




Large species, size 12.5-14 mm.



Apices of tibiae are also black (A).



Costa and subcosta yellow (B); stigma black or piceous (C).



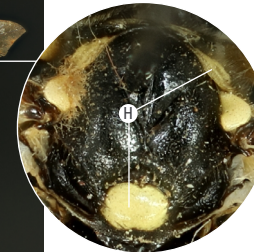
Antenna setiform with subapical segments narrower than the scape (D).



Metapleura yellow in ♀.



Legs are yellow; femora and apices of hind tibiae black (F).
Abdomen black with tergites 4-5 and often part of 6 yellow (G).
Thorax black except the yellow scutellum and pronotal edge (H).



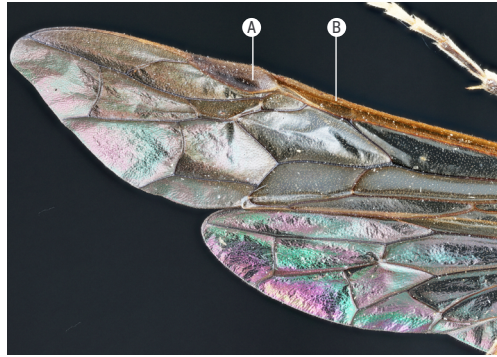
Larval hostplant:
Graminae: Brachypodium,
Dactylis. Widespread and
sporadic in woodlands.

**UK distribution map of
*Tenthredo maculata***

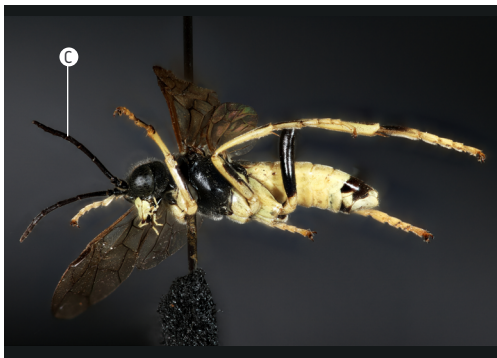




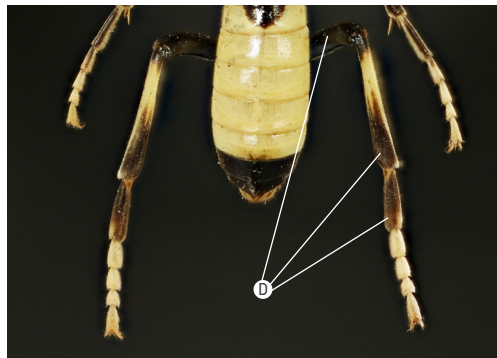
Large species, size 12.5-14 mm.



Stigma black or piceous (A), costa and subcosta yellow (B).



Antenna setiform and black (C).



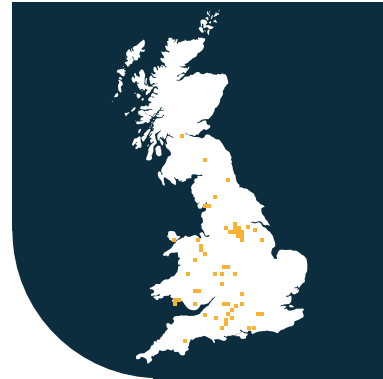
Femora, apices of tibiae and basitarsus black in ♂ (D).

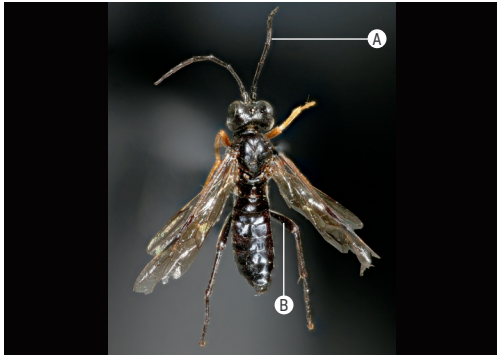


Abdomen of ♂ yellow above and below except for the first 2 and last 2 tergites (E). Thorax black except the yellow scutellum and pronotal edge (F).

Larval hostplant:
Graminae: Brachypodium,
Dactylis. Widespread and
sporadic in woodlands.

**UK distribution map of
Tenthredo maculata**





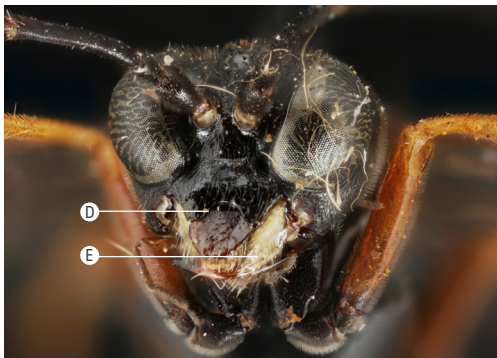
Antennae setiform and entirely black (A). Body and hind legs are all black (B).



Larger species, size 13-14 mm.



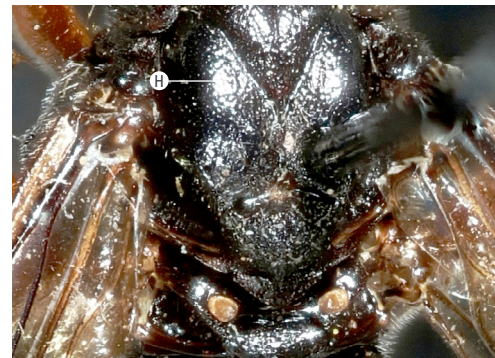
Head above shining without any surface sculpture (C).



Clypeus and often labrum black (D) and only part of mandible base white (E).



Malar space (F) scarcely as long as the diameter of front ocellus (G).



Mesonotum shining between very shallow, irregular punctures (H).

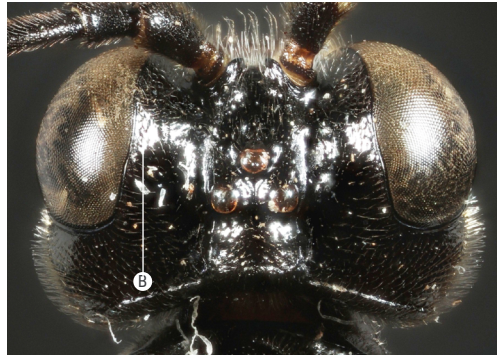
Larval hostplant:
Petasites, Tussilago.

UK distribution of
Tenthredo mandibularis





Larger species, size 13-14 mm.



Head above shining without any surface sculpture (B).



Antennae setiform, entirely black (C). Body and hind legs are all black (D).



Mesonotum shining between very shallow irregular punctures (E).



Clypeus and often labrum black (F) and only part of mandible base white (G). Malar space (H) scarcely as long as the diameter of front ocellus (I).

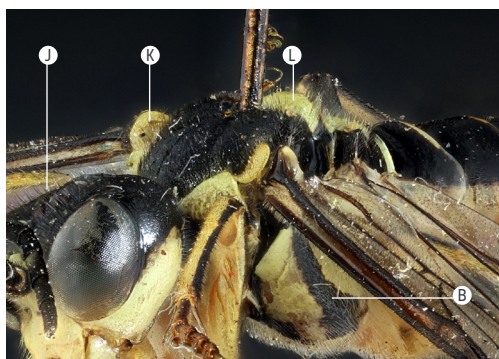
Larval hostplant:
Petasites, Tussilago.

UK distribution of
Tenthredo mandibularis

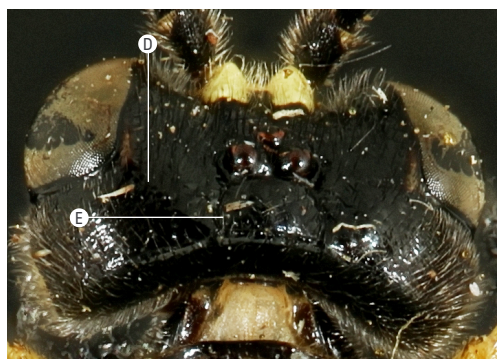




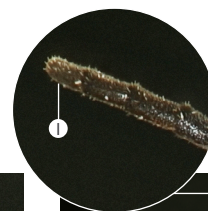
Crests above antennae (A) very prominent, as high as their distance apart.



Mesopleura and mesosternum mainly yellowish green with black subvertical stripe on the pleura (B). Pubescence on head (J), mesonotum (K) and scutellum (L) fuscous (darker, sombre).



Head not swollen behind the eyes and usually shining with sparse sculptures (D). Post-ocellar area contracted in front so that the front margin is a little longer than the side margin (E).

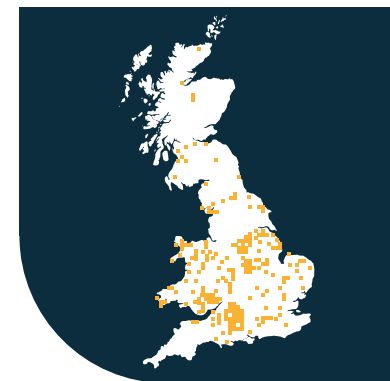


Stigma and costa of forewing black, also most of the head, thorax and abdomen above (G). Scutellum always pale (H). Antennae setiform, usually apical segment is twice as long as broad (I).

Larval hostplant:

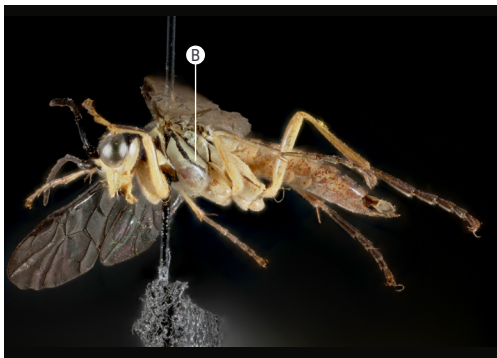
Veronica, Ranunculus, Epilobium, Tussilago, Rumex, Salix, Heracleum, Arctium lappa, Polygonum pesicaria.

UK distribution map of Tenthredo mesomela





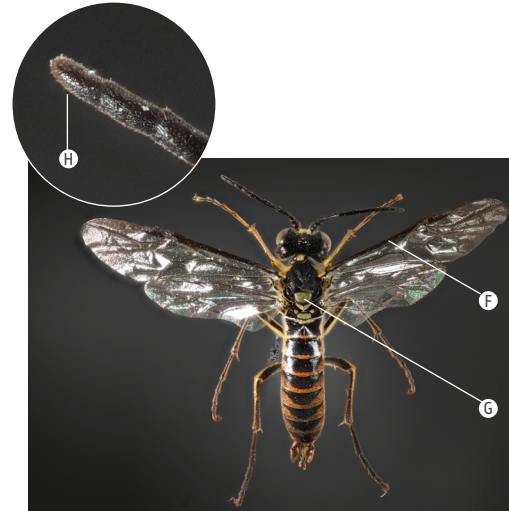
Pubescence on head, mesonotum and scutellum fuscous (darker, sombre) (A).



Size 9.5-13 mm. Mesopleura and mesosternum mainly yellowish green with black subvertical stripe on the pleura (B).



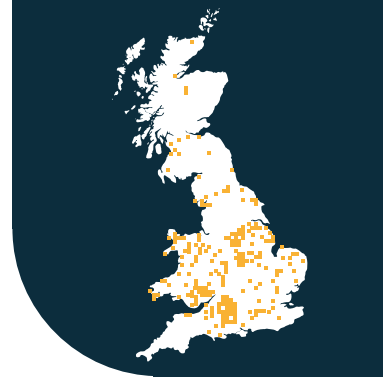
Crests above the antennae are very prominent, as high as their distances apart (C). Postocellar area contracted in front, so that the front margin is little longer than the side margin (D). Head not swollen behind eye (E).



Stigma and costa of forewing black (F), and also most of the head, thorax and abdomen above. Scutellum always pale (G). Antennae setiform, usually apical segment is twice as long as broad (H).

Larval hostplant:
Veronica, Ranunculus,
Epilobium, Tussilago, Rumex,
Salix, Heracleum, Arctium
lappa, Polygonum pesicaria.

**UK distribution map of
*Tenthredo mesomela***

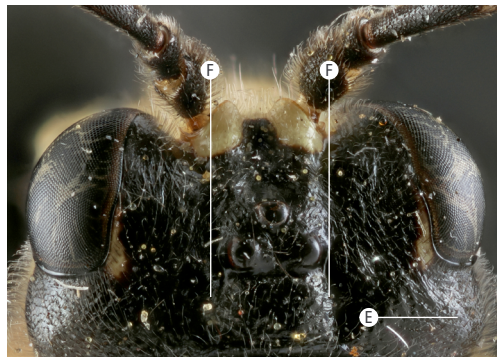




Mesopleura usually pale with black subvertical stripe (A). Stigma and costa of forewing black (B).



Crests above the antennae less prominent, in ♀ further apart than their height (C). Apical segments less than twice as long as broad (D). Antenna shorter than in *T. mesomelas*.



Head usually swollen behind the eyes and dull with alutaceous and coriaceous sculpture (E). Postocellar area almost parallel-sided; the front margin is clearly longer than the side margin (F).



Size: 9.5-12.5 mm. Pubescence on head, mesonotum and scutellum largely silvery (G).

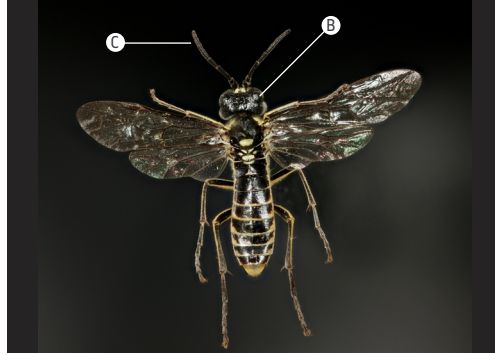
Larval hostplant:
Ranunculus, Heracleum,
Senecio fuchsii,
Dryopteris, Atropa.

**UK distribution map of
Tenthredo mioceras:** Mainly
in moorland localities.

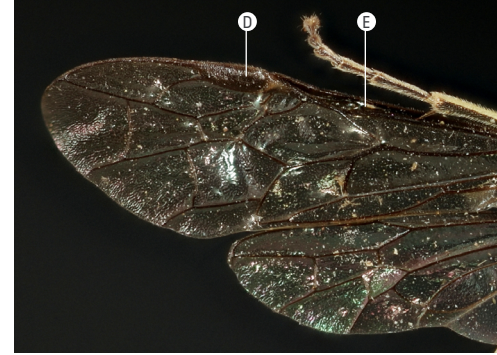




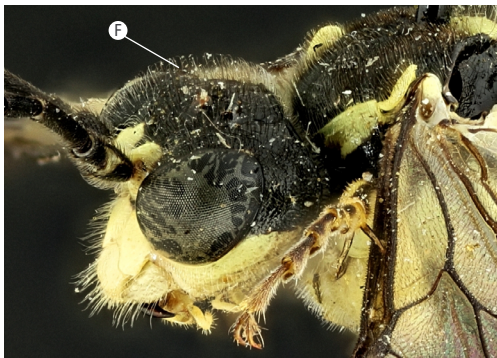
Size 9.5-12 mm. Apical segments less than twice as long as broad (A).



Head, thorax and abdomen black above (B). Antenna shorter than in *T. mesomelas* (C).



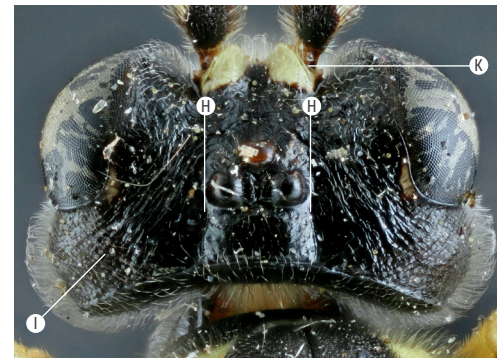
Stigma (D) and costa (E) of forewing black.



Pubescence on head, mesonotum and scutellum largely silvery (F).



Mesopleura pale with black subvertical stripe (G).



Crests above antennae less prominent (K). Postocellar area almost parallel-sided (H). Surface of head behind eyes swollen and dull with alutaceous and coriaceous sculpture (I).

Larval hostplant:
Ranunculus, Heracleum,
Senecio fuchsii,
Dryopteris, Atropa.

**UK distribution map of
Tenthredo mioceras:** Mainly
in moorland localities.





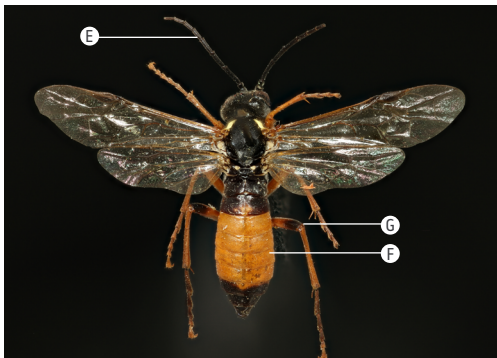
Metapleura and 1st tergite at the side usually with white spot (A).



Apex of costa (B) and stigma (C) of forewing brown.



Head dull with coarse punctures (D).



Smaller size: 9-12 mm. Antenna setiform and entirely black (E). Body black and red, tergites 3-6 of ♀ more or less red (F). Hind legs and tibia partly red. Hind femur black-marked apically (G).



Clypeus, labrum and most of the mandibles are white (H). Malar space (J) longer than the diameter of front ocellus (I).



Mesonotum dull with rough surface.

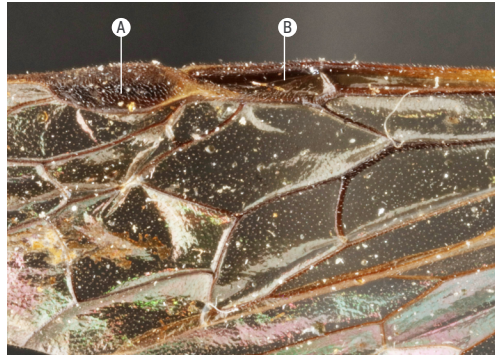
Larval hostplant:
possible *Origanum*,
Menyanthes trifoliata.

**UK distribution map of
Tenthredo moniliata:**
Occurs in suitable bogs where
Menyanthes trifoliata grows.

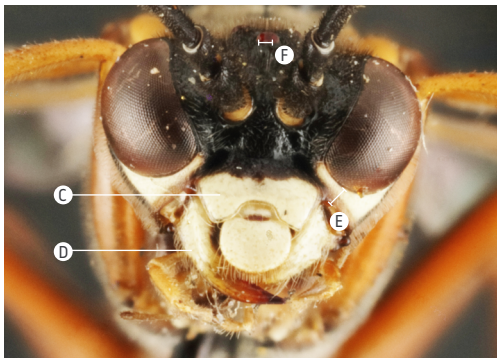




Smaller size: 9-12 mm. Head dull with coarse punctures.



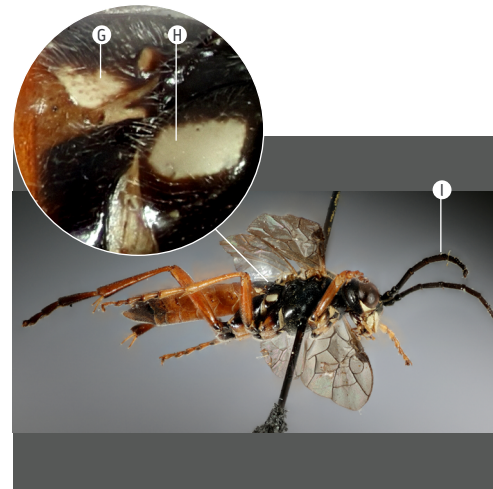
Stigma (A) and apex of costa (B) of forewing brown.



Clypeus (C), labrum and most of the mandibles are white (D). Malar space (E) longer than the diameter of front ocellus (F).



Mesonotum dull with rough surface.



Body of ♂ entirely red except from the basal and apical tergite; hind tibiae and tarsi are red; hind femur black-marked. 1st tergite (G) at the side and metapleura (H) usually with white spot. Antennae setiform, entirely black (I).

Larval hostplant:
possible *Origanum*,
Menyanthes trifoliata.

**UK distribution map of
Tenthredo moniliata:**
Occurs in suitable bogs where
Menyanthes trifoliata grows.





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www.hyonteiset.com

Large, dark species: 11-13 mm. Head strongly widened behind eyes (A). Hind margin of pronotum yellowish-white (B). Tibiae and apical margins of tergites 3-4 or 3-5 yellowish-white (C).

Photo: Raimo Peltonen, 2015.



Wing infusate, especially at their apices (D).

Photo: Sample ID-MHV00037 by Marko Mutanen, University of Oulu licenced under CC-BY-NC

<https://creativecommons.org/licenses/by-nc/3.0/>

Larval foodplant:
Sonchus arvensis.

Possibly extinct in the UK

Historical records from Kent, Bristol and Wicken Fen.



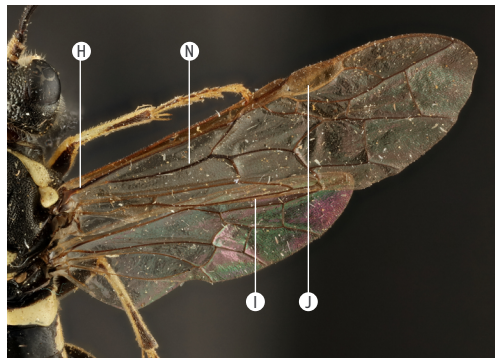
Size 10-13 mm. Antenna sublavate; subapical segments as broad as the scape (A).



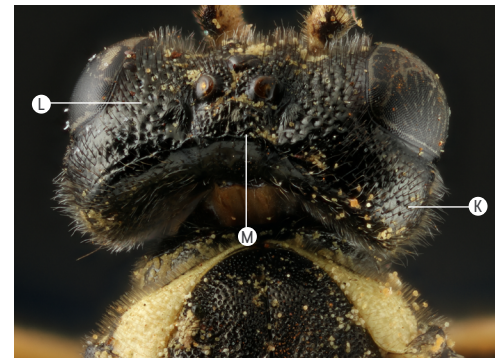
Pale apical margins to sternites (B). Downturned lateral portion of each tergite of ♀ entirely yellow (C).



1st tergite of ♀ with broad yellow band that is not constricted laterally (D). Yellow bands on hind margins of tergites broadening laterally (F). Flagellum of antenna entirely black (E). Hind tibia and tarsus marked black apically (G).



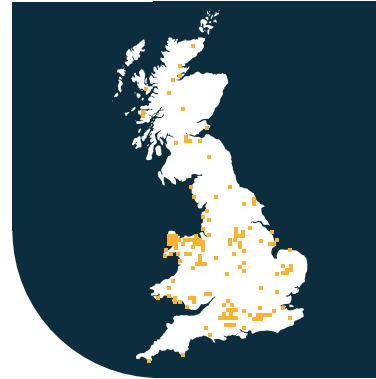
Forewing with posterior half of sub-costa (H) and medious (N) piceous. Forewing uniformly hyaline or yellowish-hyaline (I), costa and base of stigma yellow (J).



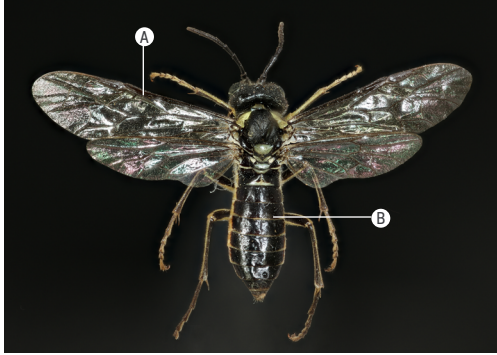
Head is never strongly widened behind eyes (K). Head above copiously punctured or coarsely coriaceous (L), post-occipital carina well-developed (M).

Larval hostplant:
Trifolium repens,
Vicia cracca.

UK distribution map of
Tenthredo notha:



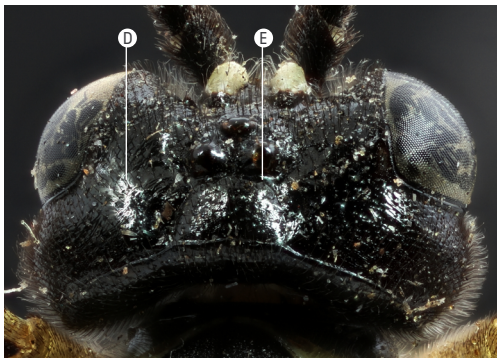
Arcuata-complex – only females of this complex are separable into species!



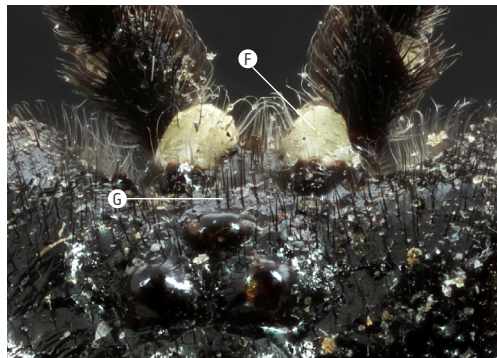
Size: 9.5-12.5 mm. Stigma and costa of forewing (A) black and most of the head, thorax and abdomen above (B).



Mesopleura and sternum mainly black with sparse sculpture (C).



Head not swollen behind the eyes and shining above with sparse sculpture (D). Postocellar area contracted in front (E).



Crests above antennae very prominent, as high as their distance apart (F). Pubescence of head, mesonotum and scutellum fuscous (G).



Antenna short, setiform with apical segment scarcely 1.5 times as long as broad (O).

Larval hostplant:
Plantago.

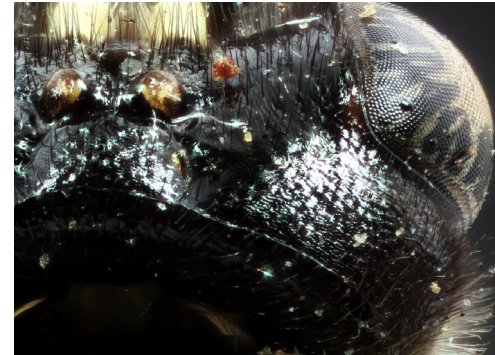
UK distribution map of
Tenthredo obsoleta:
Mainly in moorland
localities in Scotland.



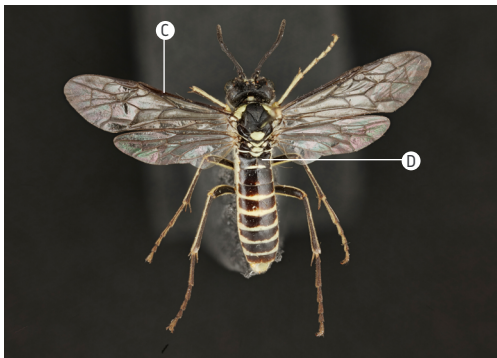
Crests above antennae very prominent, as high as their distance apart (A).



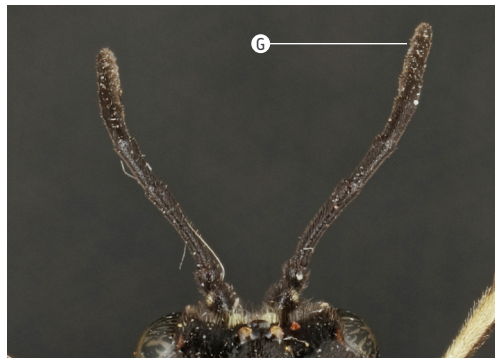
Mesopleuron and sternum mainly black with sparse sculpture (B).



Head shining above with sparse sculpture.



Stigma and costa of forewing (C) black and most of the head, thorax and abdomen above (D).



Antenna short, setiform with apical segment (G) scarcely 1.5 times as long as broad.



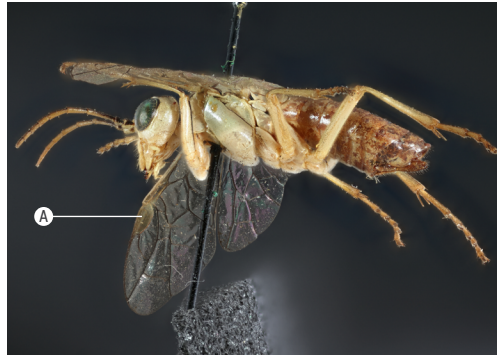
Pubescence of head, mesonotum and scutellum fuscous (E). Postocellar area contracted in front (F). Head shining above with sparse sculpture.

Larval hostplant:
Plantago.

UK distribution map of
Tenthredo obsoleta:
Mainly in moorland
localities in Scotland.



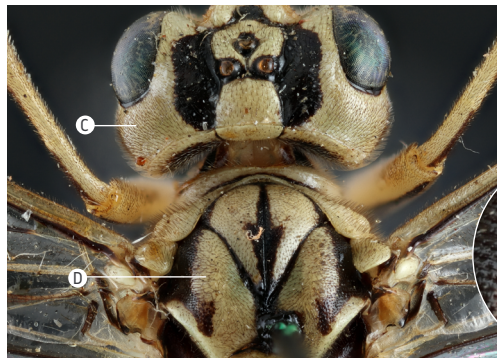
Size: 9-12 mm. Antenna setiform.



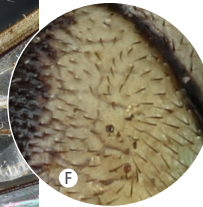
Stigma and costa of forewing green (A).



May have median dorsal black vitta developed, mainly in ♀ (B). Head, thorax and abdomen olive-green with variable black markings above. Even in the darkest forms the 1st tergite remains pale.



Head (C) and mesonotum coriaceous (D) with short stiff black hairs (F).



Larval hostplant:
Ranunculus, Plantago,
Veronica, Myosotis.

**UK distribution map of
Tenthredo olivacea:**
widely distributed throughout
Britain – in open woods,
scrubby heaths.





Size: 9-12 mm. Antenna setiform.



Stigma and costa of forewing green (A).



Head, thorax and abdomen olive-green with variable black markings above. Even in the darkest forms the 1st tergite remains pale.



Head (C) and mesonotum coriaceous (D) with short stiff black hairs.

Larval hostplant:

Ranunculus, Plantago,
Veronica, Myosotis.

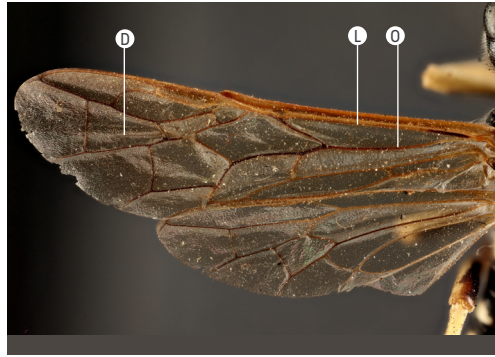
UK distribution map of *Tenthredo olivacea*:

widely distributed throughout
Britain – in open woods,
scrubby heaths.

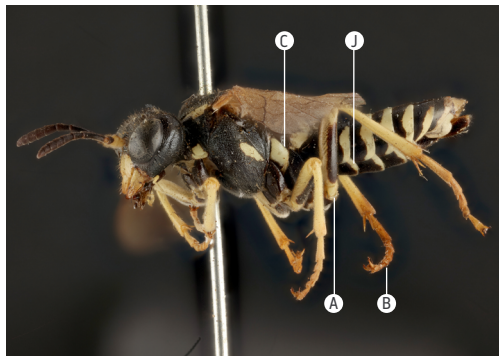




Antenna subclavate with subapical segments almost as broad as the scape. Flagellum of antenna entirely black (E). Malar space (F) shorter than 2nd antennal segment (G) in ♀.



Forewing yellowish-hyaline with brownish smudge between the stigma and the apex of wing, which is not sharply defined (D). Posterior half of sub-costa (L) and medius piceous (O).



Base of trochanters and tibiae are yellow (A). Hind tarsus and apex of tibia reddish-brown (B). Metapleura and often scutellum yellow marked (C). Sternites are usually black; at most pale apical margins at side only (J).



Smaller species; 9-11mm. Head never strongly widened behind the eyes. Head above (H) coarsely coriaceous or copiously punctured on the frons and inner orbits but shining between punctures. Post-occipital carina often well-developed (I).



Yellow bands on tergites not broadening laterally (M). Tegula black (K).

Larval hostplant:
Plantago; From the fens of
Norfolk, Suffolk,
Lincoln, Cambridge..

**UK distribution map of
Tenthredo omissa:**

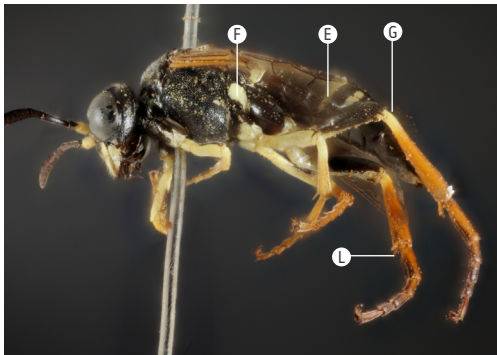




Antenna subclavate. Flagellum of antenna entirely black (A). Malar space (B) less than half of 2nd antennal segment (C) in ♂.



Tegula black. (D). Smaller species: 9-11mm.



Yellow bands on tergites not generally broadening laterally (E). Sternites are usually black; at most pale apical margins at side only. Metapleura and often scutellum yellow marked (F). Base of trochanters and tibia are yellow (G). Hind tarsus and apex of tibia reddish-brown (L).



Fore wing yellowish-hyaline with a brown smudge between the stigma and the apex of the wing, which is not sharply defined (H). Posterior half of subcosta and medius is piceous (I).

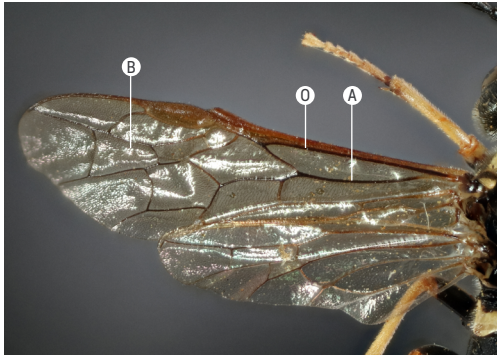


Head never strongly widened behind the eyes. Head (J) above coarsely coriaceous or copiously punctured on the frons and inner orbits but shining between punctures. Post-occipital carina often well-developed (K).

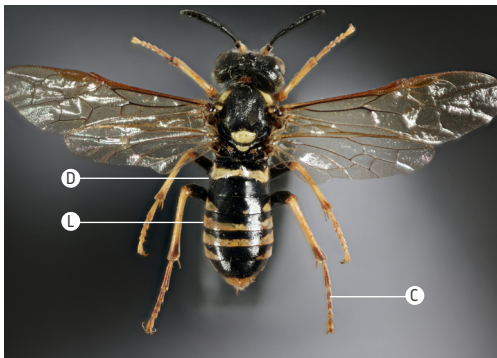
Larval hostplant:
Plantago; From the fens of
Norfolk, Suffolk,
Lincoln, Cambridge..

**UK distribution map of
Tenthredo omissa:**

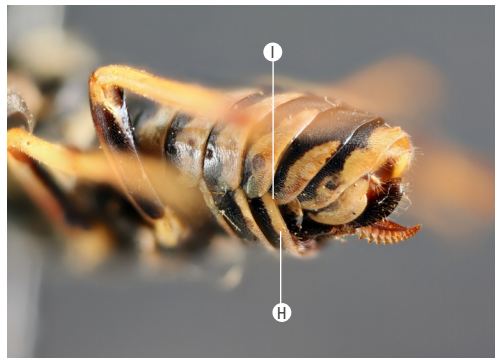




Forewing uniformly hyaline or yellowish-hyaline (B). Posterior half of sub-costa (O) and medius piceous (A).



Hind tibia and tarsus marked with reddish-brown apicaly (C). 1st abdominal tergite of ♀ with yellow band that is not constricted laterally (D). Yellow bands on tergites broadening laterally (L).



Larger species – 10-13 mm. Sternites with pale apical margins (H). Black basal band on each tergite in ♀ continued right to the edge of segments (I).

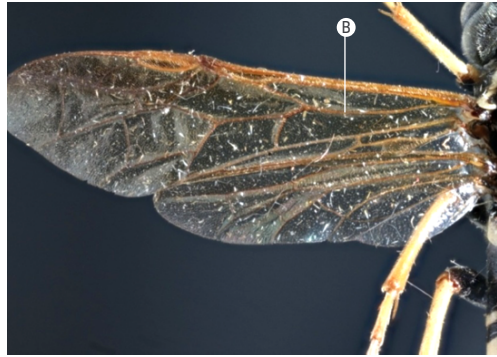


Antenna sublavate. Flagellum of antennae entirely black (E). Head above (F) copiously punctured or coarsely coriaceous, post-occipital carina well-developed (G).

Rather scarce, belongs to Arcuata-complex, only females can be separated into species.



Antenna subclavate, flagellum all or mostly reddish or yellow (A).



Sub-costa and medius of forewing entirely yellow (B).



Large species 11-15 mm.



Wings yellowish with a brownish smudge in the radial cell of the forewing (C). Tibiae and tarsi yellow with reddish brown apices (D).



Head never strongly widened behind the eyes. Head above (E) coarsely coriaceous and post-occipital carina (F) well-developed.

UK distribution map of
Tenthredo scrophulariae:





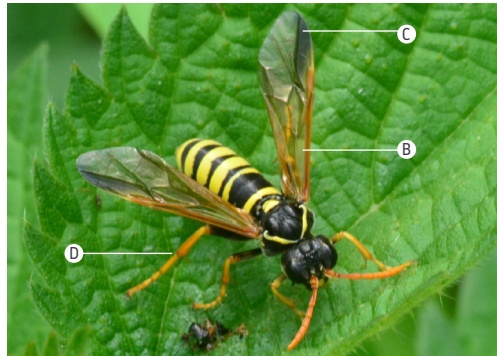
Large species 11-15 mm.



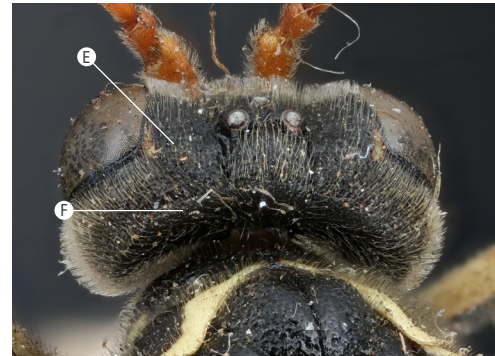
Flagellum all or mostly reddish or yellow (A).



Subcosta and medius of forewing entirely yellow (B).



Subcosta and medius of forewing entirely yellow (B).
Wings yellowish with a brownish smudge in the radial cell of the forewing (C). Tibiae and tarsi yellow with reddish brown apices (D).



Head never strongly widened behind the eyes.
Head above (E) coarsely coriaceous and post-occipital carina (F) well-developed.

UK distribution map of
Tenthredo scrophulariae:





10-12 mm

Photo by Kim Abel - Tenthredo semicolon him. Ødegård, Fredrikstad, Østfold, Norway. 03/08/2012. Leg. Ole J. Lønnve. Publisher – BioFokus Licenced under CC-BY-3.0 <https://creativecommons.org/licenses/by/3.0/deed.no>



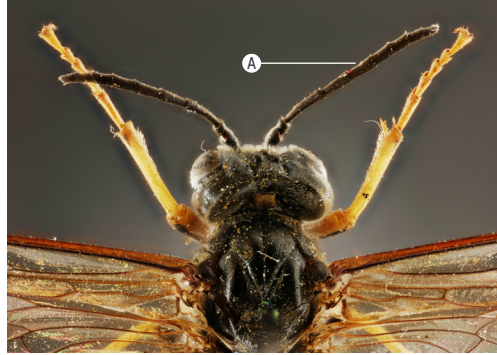
Photo by Kim Abel -Tenthredo semicolon female. Blåbærstien, Nesodden, Akershus, Norway. 27.06-31.07.2011. Leg. Ole J. Lønnve. Publisher – BioFokus Licenced under CC-BY-3.0 <https://creativecommons.org/licenses/by/3.0/deed.no>

Tenthredo semicolon (Mol, 2013) was recorded from the British Isles, from a single locality in southern England. Tenthredo semicolon was listed as occurring in England by Liston et al. (2014), but without exact data. These species were hitherto confused Tenthredo colon. (Klug, 1817). (Liston, 2016)

This species is very similar to T. colon and the two have just recently been separated (Taeger 2013). T. semicolon can be distinguished from T. colon primarily by their more reddish thighs and different sculpture on the upper side of the chest, which makes it appear shinier. (www.artsdatabanken.no)



Smaller, size: 10-12 mm.



Antenna setiform, entirely black (A).



Thorax, pronotal edge and scutellum entirely black in ♀ (B). Abdomen of ♀ black, except for tergite 3, sides of 4-5 and middle of 6-9 which are yellow (C).



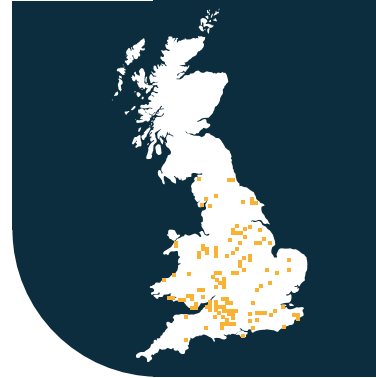
Legs are yellow with black femora, apices of tibiae and tarsi (G).



Costa mainly yellow but black at the apex and the posterior half of sub-costa (D). Stigma black or piceous (E).

Larval hostplant:
Ligustrum, Origanum in Central Europe, in Britain hostplant is unknown, very common in S. England.

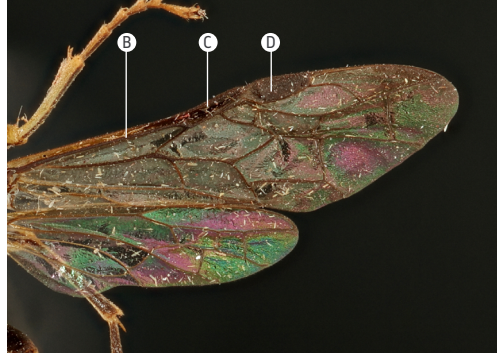
UK distribution map of Tenthredo temula:



Tenthredo temula ♂



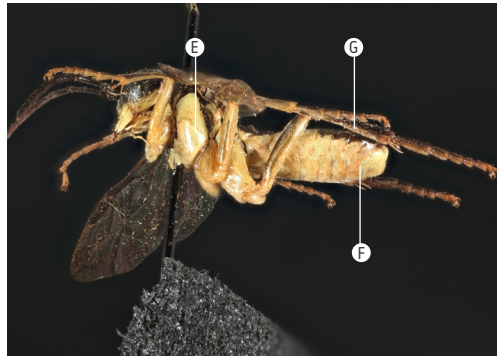
Antenna setiform entirely black (A).



Costa mainly yellow but black at the apex (C). Posterior half of sub-costa also black (B). Stigma black or piceous (D).



Smaller, size: 10-12 mm. Thorax and scutellum entirely black but yellow underneath in ♂ (E).



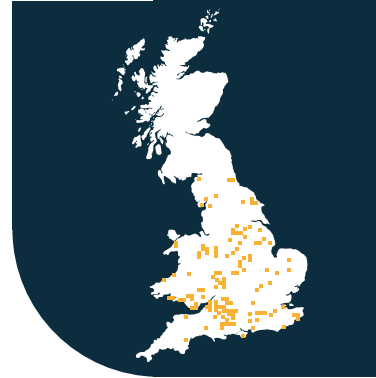
Thorax and scutellum entirely black but yellow underneath in ♂ (E). Whole underside yellow in ♂ (F). Legs are yellow-lined throughout with black behind (G).



The 3rd tergite, sides of 4th and extreme apex are yellow, otherwise entirely black (H).

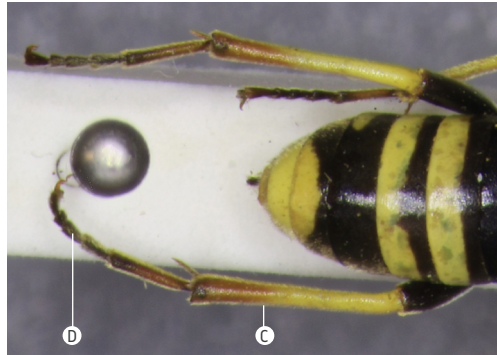
Larval hostplant:
Ligustrum, Origanum in
Central Europe, in Britain
hostplant is unknown, very
common in S. England .

**UK distribution map of
Tenthredo temula:**





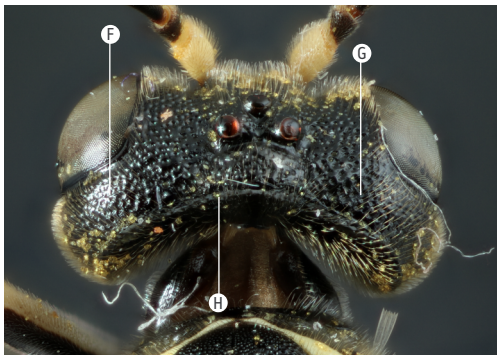
Size: 9-11 mm. Base of tibiae and trochanters are yellow (A). Sternites usually black with pale apical margins at sides only (B).



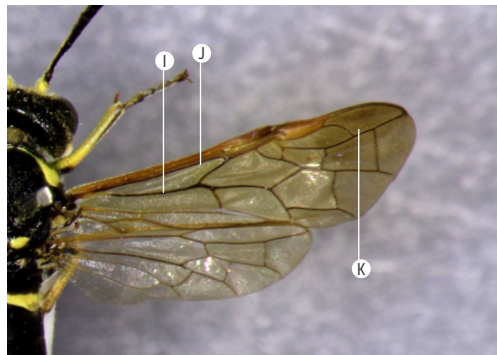
Hind tarsus black at least apically (D); apex of tibia reddish-brown in ♀ (C).



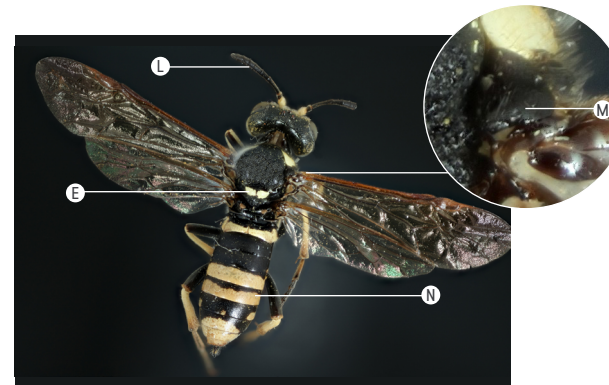
Malar space shorter than 2nd antennal segment in ♀. Metapleura and often scutellum yellow marked (E).



Head never strongly widened behind eyes (F). Head above (G) copiously punctured or coarsely coriaceous and shining between punctures. Post-occipital carina (H) well-developed.

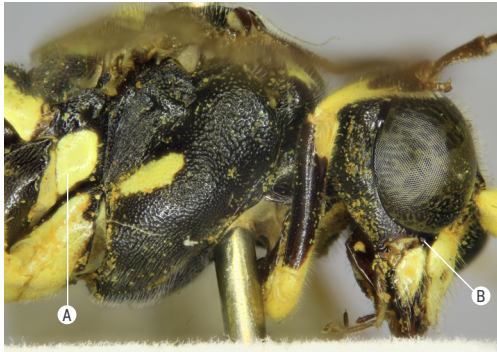


Forewing with posterior half of sub-costa (J) and medius piceous (I). Forewing yellowish-hyaline with brownish smudge between stigma and apex of wing which is not sharply defined (K).



Antenna subclavate; Flagellum of antenna entirely black (L). Tegula black (M). Metapleura and often scutellum yellow marked (E). Yellow bands on tergites not broadening laterally (N).

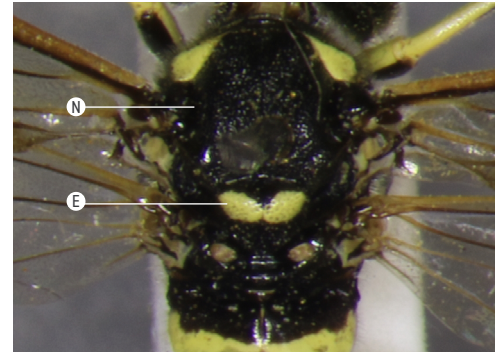
Larval hostplant:
 Origanum vulgare, Mentha,
 Plantago and Lycopus
 South of England, at the edges
 of marshes and chalk downs.



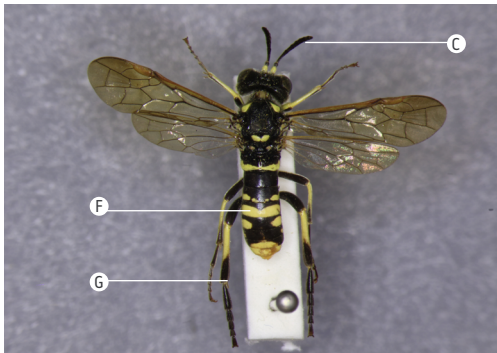
Metapleura yellow marked (A). Malar space (B) less than half of 2nd antennal segment in ♂.



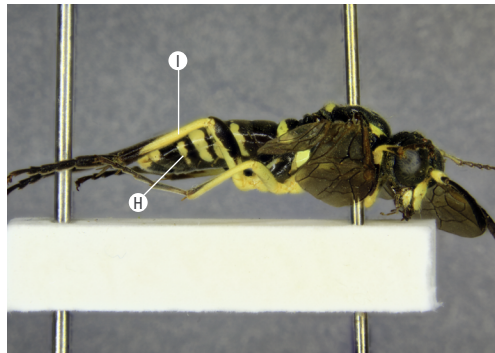
Forewing with posterior half of sub-costa (D) and medius piceous (M).



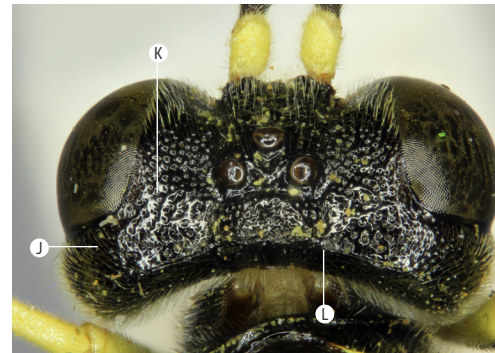
Tegula black, scutellum yellow marked (E).



Antenna subclavate, flagellum of antenna entirely black (C). Yellow bands on tergites not broadening laterally (F). Hind tarsus black at least apically; apex of tibia black in ♂ (G).



Sternites usually black with pale apical margins at sides only (H). Base of tibiae and trochanters are yellow (I).



Head never strongly widened behind eyes (J). Head above (K) copiously punctured or coarsely coriaceous and shining between punctures. Post-occipital (L) carina well-developed.

Larval hostplant:
 Origanum vulgare, Mentha,
 Plantago and Lycopus
 South of England, at the edges
 of marshes and chalk downs.



Smaller, size: 8-11 mm. Antenna partly pale, white beneath from the 3rd segment (A).



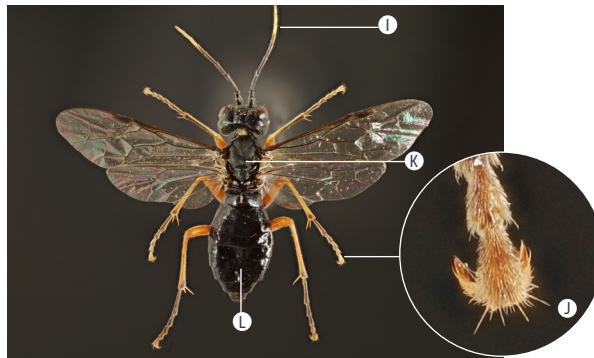
Stigma of forewing (B) unicolorous, costa (C) piceous.



Head (D) and thorax (E) dull with dense coriaceous surface sculpture.



Legs are reddish, more or less infusate (H).

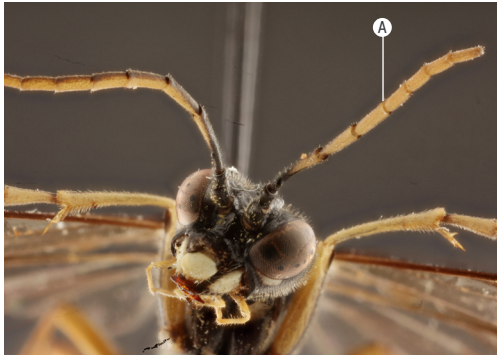


Antenna setiform, antennal segments may be more or less white-ringed or completely white from 6-9th segment (I). Middle and front legs whitish at front (J). Scutellum and mesosternum entirely black (K). Abdomen entirely black in ♀ (L).

Larval hostplant:
Polygonum bistorta, Senecio fuchsia, Salix, Alnus viridis.

UK distribution map of Tenthredo velox:
widespread in Scotland and towards the Lake District.

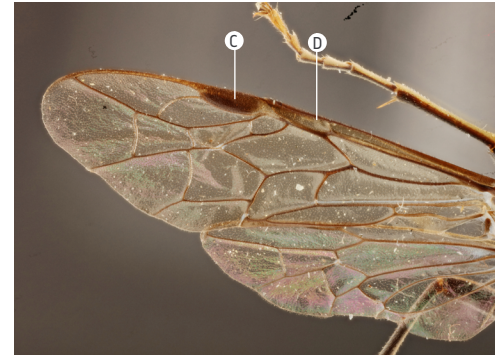




Smaller, size: 8-11 mm. Antenna pale underneath from the 3rd segment (A).



Metapleura with white fleck (B).



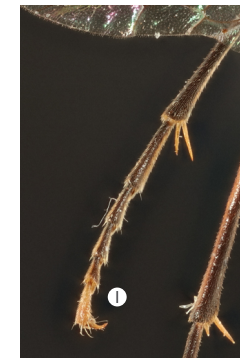
Stigma of forewing (C) unicolorous, costa (D) piceous.



Antenna setiform, black above throughout in ♂. 1st tergite of abdomen entirely black and abdomen reddish from the 3rd tergite in ♂ (E).



Head (F) and thorax (G) with dense coriaceous surface sculpture. Scutellum and mesosternum entirely black.

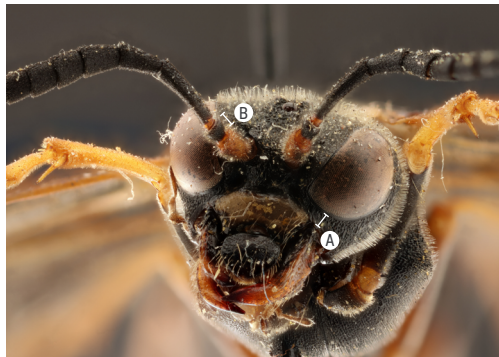


Fore- (H) and middle (I) legs whitish in front.

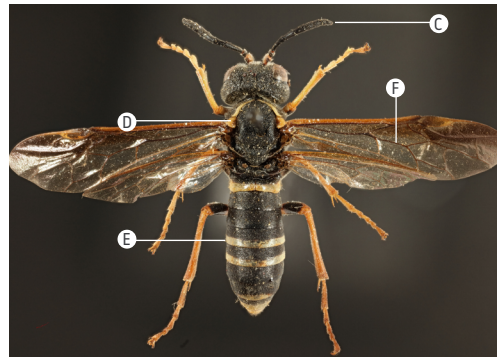
Larval hostplant:
Polygonum bistorta, Senecio fuchsia, Salix, Alnus viridis.

UK distribution map of Tenthredo velox:
widespread in Scotland and towards the Lake District.

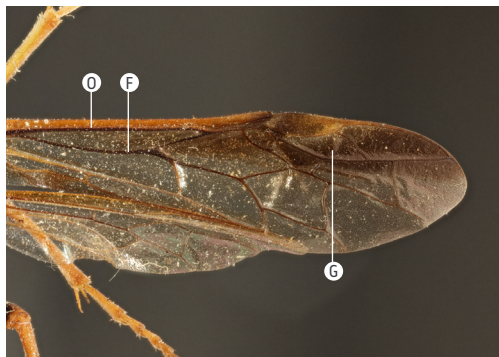




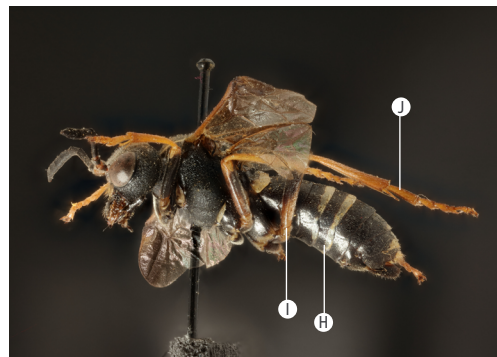
Size: 11-12 mm. Malar space (A) is as long as 2nd antennal segment (B) in ♀.



Antenna subclavate, flagellum entirely black (C). Tegula at least reddish-yellow at the edges (D). Yellow bands on tergites not broadening laterally (E).



Forewing with posterior half of sub-costa (O) and medius (F) piceous. Forewing yellowish-hyaline with brownish smudge between the stigma and apex of wing which is sharply defined (G).



Metapleura yellow marked. Sternites black with pale apical margins at sides (H). Trochanters (I), tibiae and tarsi (J) are reddish-brown.



Post-occipital carina well-developed (K). Head (L) and thorax (M) dull with dense punctures, scarcely any shining interspaces.

Larval hostplant:

Viburnum, Jasminum, Oleaceae, Lonicera, Ligustrum, Caprifoliaceae, and Acer plantanoides.

UK distribution map of Tenthredo vespa:

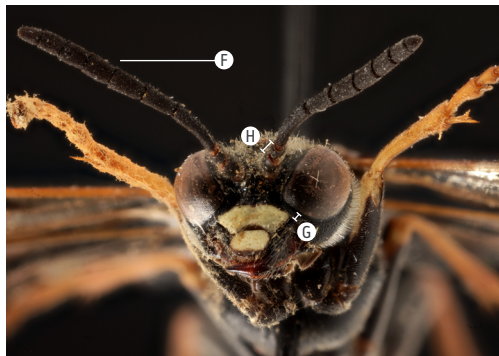




Head (A) and thorax (B) dull with dense punctures, scarcely any shining interspaces.



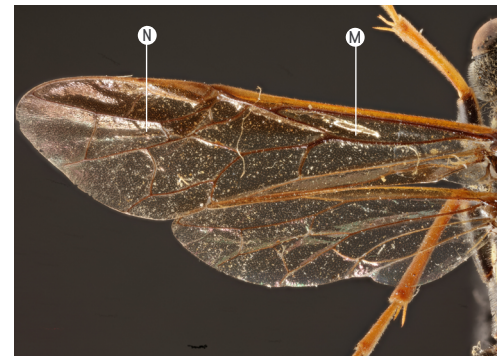
Tegula yellow-reddish at edges (C). Scutellum could often be yellow marked also. Yellow bands on tergites not broadening laterally (E).



Size: 11-12 mm. Antenna subclavate, flagellum entirely black (F). Malar space (G) is more than half as long as the 2nd antennal segment (H).



Metapleura yellow marked (I). Trochanters (K), tibiae and tarsi are reddish-brown (J). Sternites are usually entirely black (L).



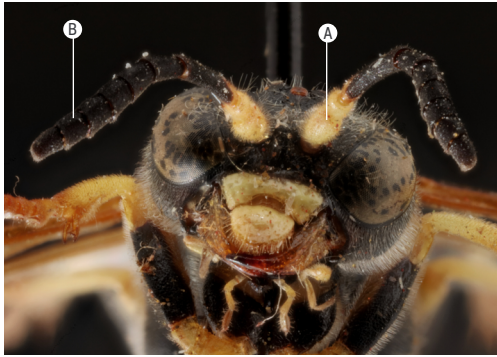
Forewing with posterior half of sub-costa and medius piceous (M). Forewing yellowish-hyaline with brownish smudge between the stigma and apex of wing which is sharply defined (N).

Larval hostplant:

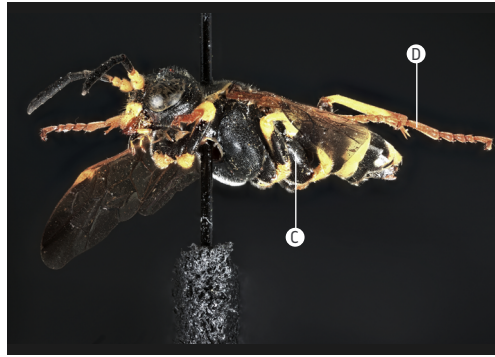
Viburnum, Jasminum, Oleaceae, Lonicera, Ligustrum, Caprifoliaceae, and Acer plantanoides.

UK distribution map of Tenthredo vespa:





Size : 8-10 mm. 2 basal segments of antenna are yellow (A). Antenna subclavate and flagellum entirely black (B).



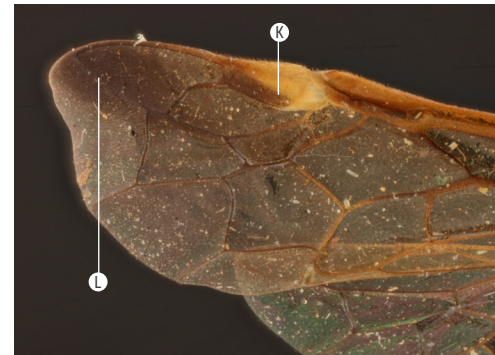
Metapleura and scutellum black (C). Hind tibia yellow; apex of hind tibia and tarsi reddish-brown (D).



Forewing with posterior half of sub-costa and medius piceous (E). Apex of 1st tergite, 5th and apex from 7th tergite are yellow. Bands are not broadening laterally (F).



Head above (G) coarsely coriaceous and post-occipital carina (H) well-developed. Edge of pronotum (I) and tegula (J) yellow.



Stigma in forewing yellow with piceous apex (K). Forewing yellowish-hyaline with a brownish smudge between the stigma and the apex of wing (L).

Larval hostplant:
Hypericum perforatum..

UK distribution map of
Tenthredo zona:
mainly on dry heaths and
chalk downs.





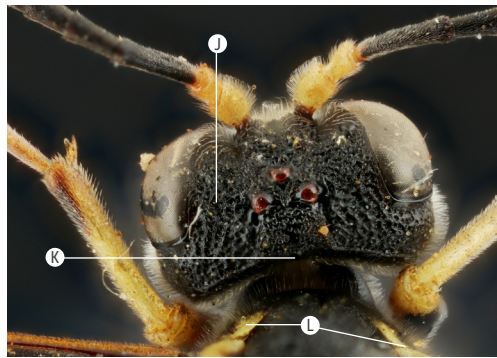
Smaller size : 8-10 mm. 2 basal segments of antenna are yellow (A).



Metapleura black (B). Sternites usually black, at most with pale apical margins at side (C).



Apex of 1st tergite, 5th and apex from 7th tergite are yellow, yellow bands are not broadening laterally (E). Apex of hind tibia and femora is black (F), tarsi reddish-brown (I).



Head above (J) coarsely coriaceous and post-occipital carina (K) well-developed. Edge of pronotum and tegula yellow (L).



Stigma in forewing yellow with piceous apex (M). Forewing yellowish-hyaline with a brownish smudge between the stigma and the apex (N). Forewing with posterior half of sub-costa (D) and medius piceous (O).

Larval hostplant:
Hypericum perforatum..

UK distribution map of
Tenthredo zona:
mainly on dry heaths and
chalk downs.



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Numerous experts, colleagues and family have supported this work and I am truly grateful to all of them:

The production of this ID guide would not have been possible without the help and assistance of the wonderful AMC staff at the Natural History Museum. I am very grateful to John Tweddle for permitting the use of photographic facilities at the AMC and making reference material available for this project. I would like to say a big thank you for Chris Raper for teaching me the art of using the Photo Stacker; for Florin Feneru tirelessly organising my bookings and assisting with reference materials and Steph West for being an amazing and truly supportive project manager.

I would like to express my gratitude for Suzanne Ryder, Gavin Broad and Natalie Dale-Skey for permitting the use of facilities on the Hymenoptera Department and for providing data and reference material for my images.

I would like to give a special thanks to Andrew Halstead for his continuous support, expert taxonomic advice and his valuable comments and criticism on the script.

Special mention must go to Ashleigh Whiffin and Vladimir Blagoderov from the National Museums Collection Centre, Edinburgh for providing images of *Tenthredo brevicornis*. I am also very grateful that Henri Goulet and John Theodore Huber permitted the use of two wonderful Symphyta illustrations from their book: Hymenoptera of the World: An Identification Guide to Families.

Huge thanks for Stephen Plant and David Nicholls for their amazingly kind and enthusiastic response to my emails, for the information and photographs they provided. I would like to thank the Natural History Museum's Design Team for putting their magic touch on the pages to make it look amazing. I am also grateful for all the Local Biological Record Centres who kindly give their permission to use their data and therefore I could attach distribution maps from the NBN website.

I am also indebted to my father – Istvan Fekete – who very kindly helped me with dozens of images that needed a bit of Photoshop adjustment or any other corrections.

**Special thanks to all the Local BRCs and other Recording Groups
who gave permission to use their data and records via
the National Biodiversity Network**

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This guide has been produced as part of the Identification Trainers for the Future Project.

Identification Trainers for the Future is led by the Natural History Museum, London in partnership with the Field Studies Council and National Biodiversity Network Trust.

The scheme is generously supported by the Heritage Lottery Fund Skills for the Future programme.

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