

KEY TO THE IDENTIFICATION OF SUB-FOSSIL
SPIDER REMAINS FROM ARCHAEOLOGICAL
DEPOSITS

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KEY FOR THE IDENTIFICATION OF SUB-FOSSIL SPIDER REMAINS

Introduction

Coleoptera and other insect remains have been commonly detected from waterlogged deposits including those associated with archaeological features, and their identification and analysis is now a well established discipline. Remains of spiders have also been encountered in such deposits, but hitherto, study of them has been limited to the more obviously identifiable taxa.

This key has been produced in order to facilitate recognition of disarticulated remains and only those parts of the exoskeleton likely to be preserved are dealt with. It is anticipated that as the key is used, other features will be noted, and a more comprehensive identification key can then be undertaken. Meanwhile, this preliminary aid for recognition should prove useful at least in establishing the family, and possibly, genus of the spider sclerite. Specific identification can only be achieved by direct comparison with modern comparative reference specimens, and although species characters are given here for certain genera, the key is not designed for identification at this level.

The Linyphiidae will form the basis of a separate identification key.

ATYPIDAE

(1 species)

The only British representative of this family. It differs from other spiders in possessing lung-books instead of tracheae and in having large chelicerae which articulate vertically, with fangs which lie parallel to the body axis when at rest.

Atypus affinis Eichwald

Length: f. c12mm. m. c8 - 9mm.

Carapace: trapezoid, wider at front, (fig. 1a), greenish brown becoming yellow when preserved.

Eyes: 8, (fig. 1b.)

Chelicerae: In adults 10 - 13, usually 11 teeth on inner and small tooth on outer margin (fig. 1c).

Ecology

Forms eight inch burrows usually in herbage, especially in heather in sandy places or chalky or friable soils which do not become waterlogged. Banks with a southerly aspect are preferred.

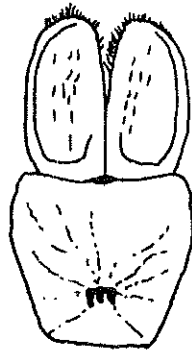
Distribution

Herts., Cambridge, Essex, Middlesex, Kent, Sussex, Surrey, Hants., Dorset, Somerset, Cornwall, Pembroke, Glamorgan, Offaly, Channel Islands, Isle of Wight, Scillies and Lundy. In Europe Denmark to Algeria and eastwards to Hungary.

Fossil record

Figure 1.

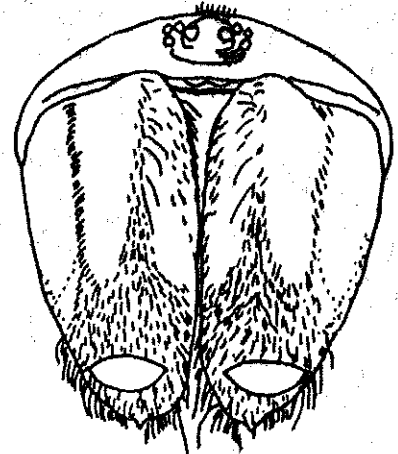
Alyptes affinis



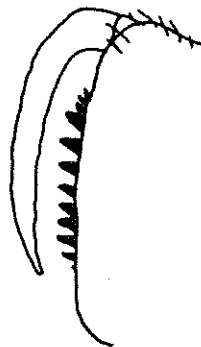
c. dorsal view of carapace
and chelicerae



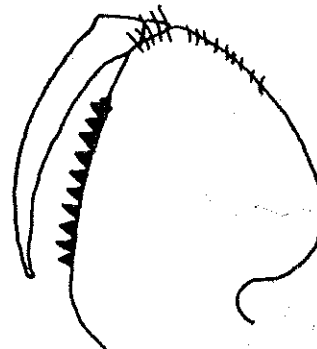
b. position of eyes



d. anterior view



male



female

e. chelicerae showing teeth on inner margin

ERESIDAE

(1 species)

Eresidae, together with the Dytinidae and Uloboridae make up the Cribellates or Lace-web spiders. There is only one British species.

Eresus niger Petagna

Length: c8mm.

Carapace: wide in front (as in Salticidae), with head convex, (fig. 2a), velvety black with scarlet at edges.

Eyes: 8, (fig 2a), narrow clypeus with a projection between the Chelicerae.

Chelicerae: Robust, no teeth or ridge on inner margin, outer margin angled apically with a tooth and scopula (fig. 26).

Ecology

Female burrows into ground. Generally southern, coastal heathery slopes.

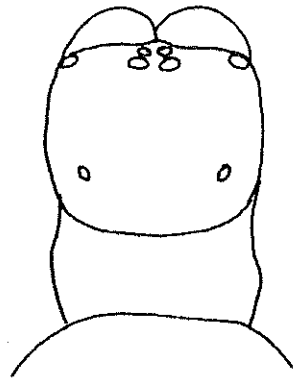
Distribution

In Britain, 6 males and 1 female found between 1816 and 1906 in Parley Heath (Dorset), Bournemouth and Poole.

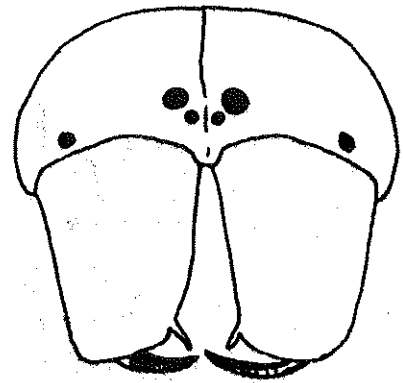
Fossil record

Figure 2

Eresus niger



a. dorsal view of carapace



b. anterior view of
carapace and chelicerae
showing position of eyes

DICTYNIDAE

(16 species)

Characters of genus

Carapace: Elevated in front. Thorax has fovea

6 genera separated on size, leg, eyes (fig. 3, c-f) and clippers characters

Large spiders (5-14mm).....	<u>Cinflio</u>
Tibia: f. 1, 11, 111 with spines, m. 111 with single spine	<u>Altella</u>
Clypeus wider than twice diameter of anterior median eyes (fig 3c.)	<u>Dictyna</u>
Clypeus narrow, anterior median smaller than anterior lateral (fig 3a)	<u>Lathys</u>
Clypeus narrow, trapegoid of median eyes wider at back (fig 3f)	<u>Argenna</u>
Clypeus narrow, eyes widely spaced, median trapegoid equal (fig 3e)	<u>Protadia</u>

Cinflio species similar in appearance, separated on palpal tibia.

C. fenestralis (stroem) more common in north,

C. similis Blackwall (fig. 3, a and b) & C. ferox (Walckenaer)

commoner in South. Found under trees, gorze, stones, walls, windows.

Dictyna The eight species are divided into two species groups based upon the species groups based upon the carapace colour and shape of the male Chelicerae. (See fig 3, g. and h.).

Group I: D.arundinacea (L.), pusilla Thor., Major Menge, uncinata Thor. and latens (Fabr.). M. separated on palp characters. f.difficult to separate and there is much interspecific variation.

Group II: D.puella S.m., flavescens (Walck.) and viridissima (Walck.).

These have a row of semicircular light patches on the posterior part of each margin. Male Chelicerae have swelling at base. M. separated on shape of ridges on Chelicerae, f. upon position of anterior eyes.

Lathys Two species separated on size, colour and m. palp differences. Both found only in the South.

Argenna subnigra (O.P. Cambridge). Identified on eye position (fig. 3f.)

Protadia patula (Simon) " " " " " 3e.

Altella lucida

Eyes: Ant. sub-contiguous, post.med. close to lats. 1m. found in house in
Herts.

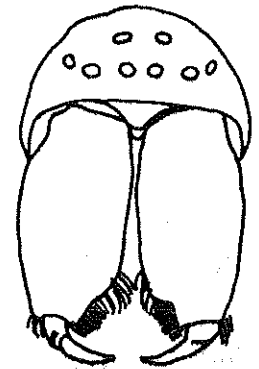
Figure 3

DICTYNIDAE



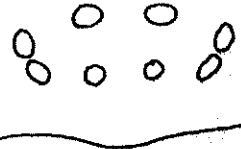
a.

dorsal view of cephalothorax

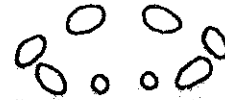


b. anterior view

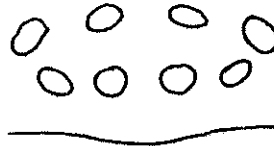
a. and b.
Cinflia similis



c. Dictyna



d. Lathxys

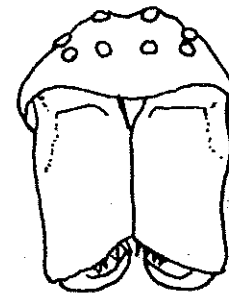
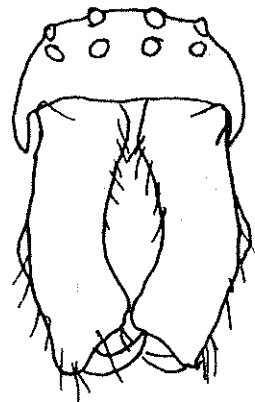


e. Protadia



f. Argenna

c. - f.
arrangement of eyes



g. and h.
anterior views of Dictyna
carapaces.

g. Dictyna arundinacea

h. D. puella

ULOBORIDAE

(2 species)

Family characters

Carapace: (fig 4a, c)

Eyes: 8, dark

Chelicerae: Robust, parallel sided.

Uloborus walckenaerius Latreille

Length: f. 3.5-6mm. m. 3-4mm.

Carapace: Brown with median and lateral bands covered in white hairs. (fig)

Eyes: fig 4a, b.

Sternum: Dark brown.

Ecology

Heather.

Distribution

Southern counties including Devon and New Forest.

Hyptiotes paradoxus (C.L.Koch)

Length: f. 5-6mm. m. c4mm.

Carapace: (fig. 4c). Ginger to dark brown with dark/black markings.

Eyes: fig. 4c.

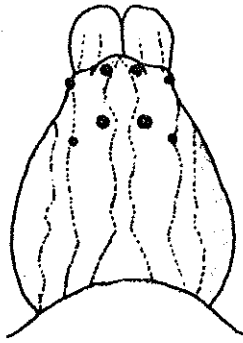
Ecology

Often yew or box trees and other conifers.

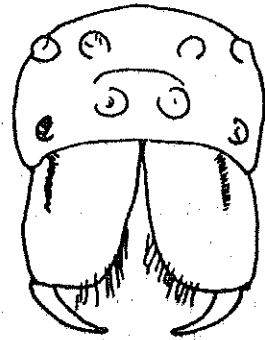
Distribution

New Forest, Hampshire, Surrey, and Glengariff, Cork. Old record from Lake District.

Figure 4
ULOBORIDAE



a. dorsal view of Uloborus



b. anterior view of
Uloborus



c. dorsal view of Hyptiotes
paradoxus (male)

OONOPIDAE

(5 species)

Oonopidae are small, pale coloured spiders. Five species occur in Britain today, but only two are considered native, the others are established in hot houses.

Characters of Family

Carapace: smooth, no thoracic fovea, narrowed in front.

Eyes: 6 except in introduced Diblemma, grouped together.

Native Species

Oonops pulcher Templeton and O. domesticus de Dalmas

Length: 1.5-2mm.

Carapace: Pink to brick red.

Eyes: 6, (fig. 5a)

Species separated on palp and tibia features.

Ecology pulcher: under stones, matted vegetation, leaves, moss and birds nests.

domesticus: Merioneth, England S. to Lancs, Argyll.

Introduced species

Ischnothyreus velox Jackson

Carapace: yellow brown, granular surface.

Eyes: (Fig. 5c)

Occurrence: Hot houses at Kew, Chester and Alnwick.

Triaeris stenaspis Simon

Carapace: redder than I. velox

Eyes: (fig. 5b)

Sternum: (fig. 5f)

Occurrence: Hot houses at Dublin and, once at Penrith.

Diblemma donisthorpei O.P. Cambridge

Carapace: yellow, flatter than Oonops, two curved rows of bristles on tubercules.

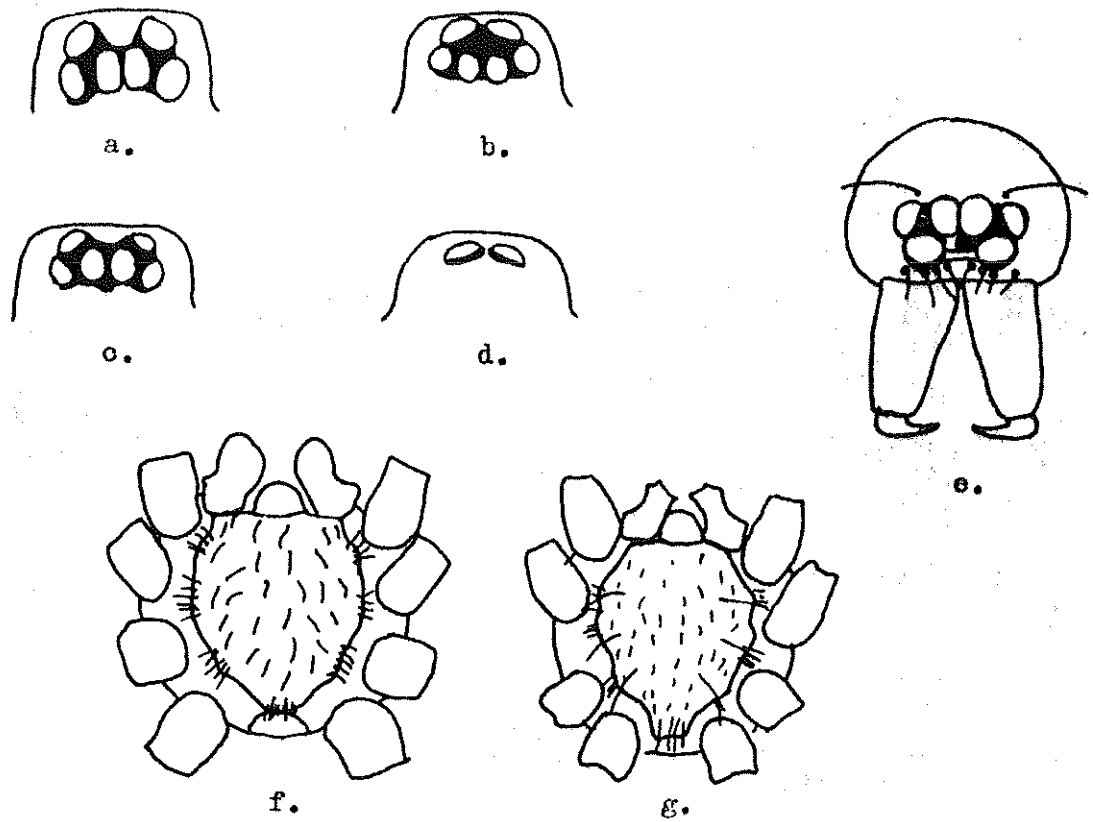
Eyes: 2, (fig. 5d)

Sternum: (fig. 5g)

Occurrence: Under flower pots at Kew.

Fig. 5

Oonopidae



eye arrangements:

- a. Oonops
- b. Triaeris
- c. Ischnothyreus
- d. Diblemma

anterior view

- e. Oonops

ventral view of sternum:

- f. Triaeris stenaspis
- g. Diblemma donisthorpei

DYSDERIDAE

(6 species)

The three genera are separated on the positions of the six eyes (figs. 6a-c).

Characters of Family

Carapace: smooth with no thoracic fovea.

Eyes: 6

Dysdera erythrina (Walckenaer) and D. crocata C.L.Koch

Length: 8-15mm.

Carapace: Red. (fig. 6e)

Eyes: 6, (fig. 6a, d)

Chelicerae: strong, projecting in front, basal segment with teeth, usually 3, fang very long.

Sternum: Connected to carapace with long, chitinous strips. Species separated on leg, genital and palp characters.

Ecology

Warm places (e.g. sun warmed stones, rubbish dumps) under stones, on sandy or chalky soils. Prey on woodlice.

Distribution

Widespread. D. erythrina not found north of Lancs.

Harpactea hombergi (Scopoli)

Length: f. 6-7mm. m. 5-6mm.

Carapace: dark brown, narrowing more anteriorly than preceding.

Eyes: Six (fig. 6b)

Chelicerae: O.m. 2 teeth, i.m. 2-3 teeth, very long fang.

Ecology

Under bark, stones, matted vegetation, often in woods.

Distribution

Widespread.

Segestria senoculata (Linnaeus), bavarica C.L.Koch, florentina (Rossi)

Length: 7-22mm

Carapace: (fig. 6g)

Eyes: Six, (fig. 6c)

Sternum: Elongated, attenuated in front.

Chelicerae: Two rows of teeth, outer: 3 teeth, central being largest,
inner row: two teeth.

S.senoculata (Linnaeus)

Length: 7-10mm

Occurrence: Widespread, walls, stones, bark.

S.bavarica C.L.Koch

Length: 10-12mm

Chelicerae: Polished black or brown.

Occurrence: Rare on Mainland, ?Berks & Dorset, Cornwall, Scilly, Lundy and
Channel Islands.

S.florentina (Rossi)

Length: 13-22mm

Chelicerae: Green sheen (sometimes bronze in m.)

Occurrence: Rare, almost always near or at a sea port.

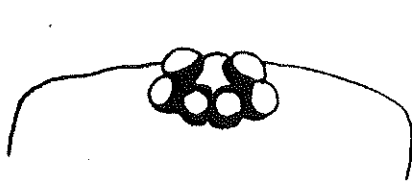
(Exeter, Plymouth, Bristol, Westminster, Bridport, Fowey). Only established
in southern towns near the sea, therefore?imported species.

Fossil record

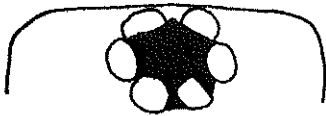
Harpactea rombergi.

Peat associated with a Bronze Age trackway, (Girling 1976).

Figure 6.
DYSDERIDAE



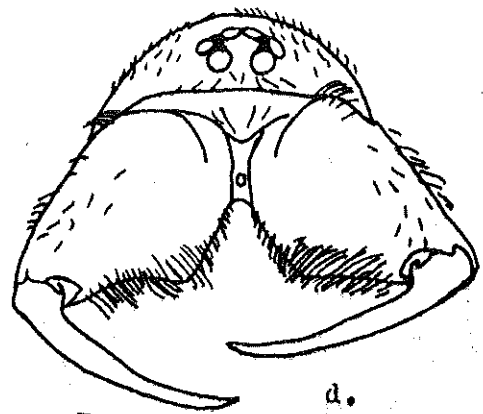
a.



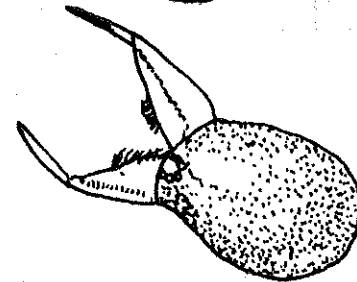
b.



c.



d.



e.

eye arrangements:

- a. Dysdera
- b. Harpactea
- c. Segestria

anterior view

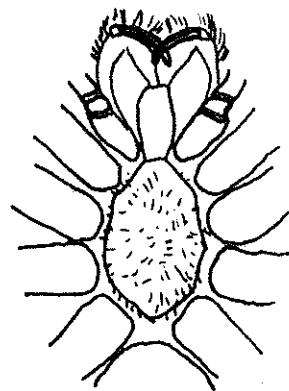
- d. Dysdera

dorsal view

- e. Dysdera crocata
- f. Segestria senoculata

sternum:

- f.



f.



g.

SCYTODIDAE

(1 species)

The Spitting spider. In Britain, the Scytodidae and Pholcidae are confined to houses and cellars, but they are found away from houses in warmer countries.

Scytodes thoracica Latreille

Length: 5-6mm

Carapace: no thoracic forea, elevated behind (fig. 7a)

Eyes: Six, (fig. 7b)

Sternum: Pale with black mark by each leg, fused to labium (fig. 7c)

Chelicerae: Short fang, chitinous laminae (fig. 7d)

Ecology

In houses on walls.

Distribution

Rare, counties bordering South Coast, Dorset, Wilts, Sussex, Kent, Oxford, Hants, Somerset, Gloucs., Berks, London, Cambs. Isle of Wight.

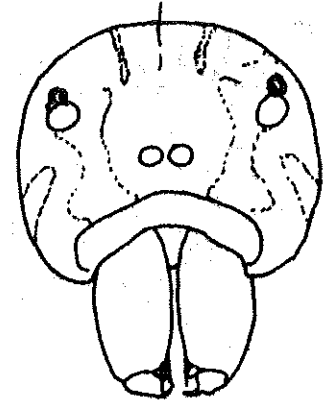
Figure 7.

Seytides thoracica

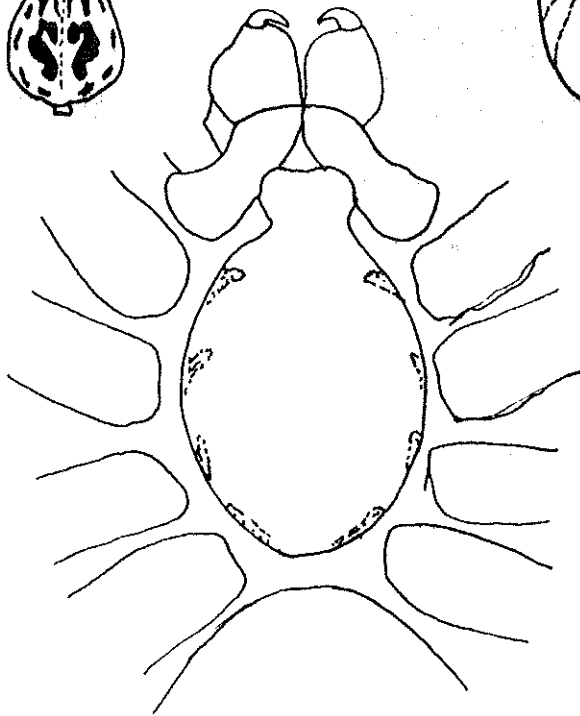
a. dorsal view of
carapace



b. anterior view



c. sternum



d. chelicera



PHOLCIDAE

(2 species)

Pholcus phalangiodes (Fuesslin)

Length: 8-10mm

Carapace: narrowed in front, pale yellow with brown markings in region of forea, covered with fine hairs.

Eyes: Six (but eight in some foreign species), small medians almost touching, widely spaced from medians, (figs. 8a)

Chelicerae: Large tooth at margin, also, 2 tooth like prominences in m., (fig. 8b).

Ecology

Walls in houses.

Distribution

Bristow (1958) states that the southern range coincides with the limit of the southern for the mean annual temperature of 50°F. North of this, it is confined to cellars where temperatures vary little. Suggest that the absence of extremes of temperature determines the survival of pholcus.

Physocyclus simoni Berland

Length: 2-2.5mm

Carapace: yellow brown, head sharply divided from thorax

Eyes: 8, similar to Pholcus, but with median almost touching laterals

Chelicerae: Large tooth at margin, in addition, tooth in front in m. (fig. 8c)

Ecology

Walls in houses.

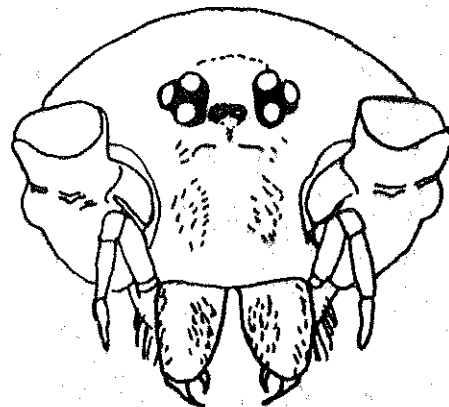
Distribution

Exclusively in dry wine cellars, ? import from France.

Figure 8.

PHOLCIDAE

a. anterior view of Pholous



b. male chelicera of P. phalangioides



c. male chelicera of Physocyclus simoni



GNAPHOSIDAE

(25 species)

These nocturnal spiders include the domestic 'Mouse-spider'.

Characters of Family

Carapace: Broad or attenuated in front.

Eyes: Two rows, posterior medians often irregular - oval or triangular.

Chelicerae: Vertical and toothed.

Six genera separated by following characters

- Chelicerae with serrated ridge on i.m. Gnaphosa
- Chelicerae with tooth/teeth, but no ridge on i.m.
posterior row of eyes procurved or straight
- Carapace with no fovea, clothed in squamiform hairs Micaria
- Carapace with fovea, larger
- Ant. median eyes larger than laterals Herpyllus
- Ant. medians not larger, usually smaller than laterals
- Both rows of eyes nearly straight, sternum long, narrow Phaeocedus
- Ant. row of eyes procurved, sternum oval
- Post. row of eyes (nearly) straight, scarcely longer than
ant., carapace attenuated in strong, most spp. black Zelotes
- Post. row procurved, longer than anterior, carapace broad, not
attenuated. Drassodes

Drassodes (figs. 8a-f)

Six species fall into two groups on tibia and truchanter.

Characters. In D.lapidus (Walckenaer),

Chelicerae teeth vary (figs. 8c,d,e.)

Herpyllus (Scotophoeus) blackwall: (Thorell). (fig. 8g)

Widespread species normally found in houses and out houses.

Phaeocedus braccatus (L.Koch)

Rare southern species, in leaves, under stones.

Zetotes

Nine British species identified by genitalia, tibia, palps and colour. Usually found in coastal and chalky areas.

Gnaphosa

The three British species are separated on tibia characters.

Micaria

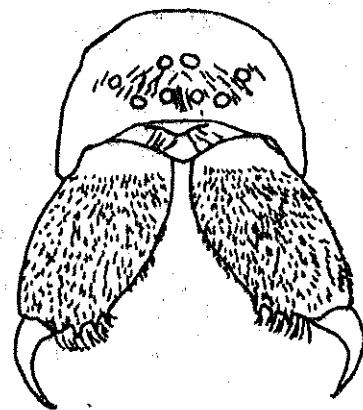
Eye arrangement (figs. 8h,i) combined with abdomen, palp and tibia features used to divide the three species

Figure 9.

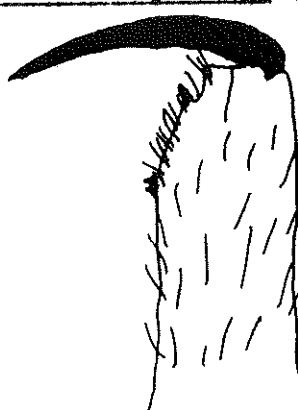
GNAPHOSIDAE



a. Drassodes lapidosus (dorsal).



b. Drassodes (anterior)



c. D.lapidosus



d. D.lapidosus var.
macr



h. Micaria pulicaria



e. D.lapidos var.
cupreus



f. D.pubescens



i. S.scintillans



g. Scotophloeus
blackwelli

CLUBONIDAE

(35 species)

These spiders strongly resemble the Gnaphosidae, from which they are separated on arrangement of the anterior spinners. Genera, Clubonia and Cheira canthium, Agroeca, Agroecina, Slotina, Liocranum, Zora and Phrurolithus. (fig. 10).

The malp palps are important in identifying these spiders and separating them from Gnaphosidae. Identification of fossil remains which are unlikely to include palps is likely to be difficult, if not impossible, therefore little attention is devoted to them in this key.

ANYPHAENIDAE

(1 species)

The single species is related to the Clubonidae. Bristow (1958) refers to it as "The Buzzing Spider".

Anyphaena accentuata (Walckenaer)

Length: f. 4.5-7.5mm. m. 4-6.5mm.

Carapace: (fig.11) Cream or light brown with grey, brown or black markings dark forms also.

Eyes: 8, (fig.11)

Sternum: Colour variable, brown, darker towards margins.

Chelicerae: Robust, in m. streaked with brown, outer margin 3 teeth, inner margin 6; basal 3 close and smaller.

Ecology

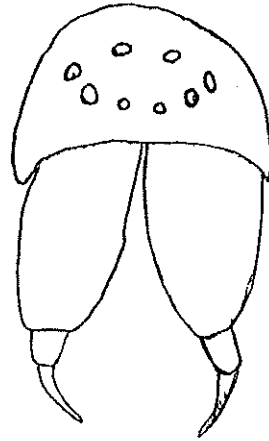
Trees and bushes, especially oaks and conifers. Found on leaves where they feed on flies and leaf hoppers.

Distribution

All over British Isles.

Figure 11.

Anyphaena accentuata



anterior view

SPARASSIDAE

(1 species)

Micrommata, together with Thomisidae species, make up the Crab Spiders because of the curvature of the legs and their sideways gait.

Micrommata virescens (Clerck)

Length: f. c12mm., m. c8mm.

Carapace: longer than broad, narrowed in front. Females and young males are bright green, male yellowish-green (with scarlet rings on abdomen).

Eyes: 8, anterior row recurved, posterior row procurved. (fig. 12)

Chelicerae: I.m. 2 large and 1 small tooth, well defined cheliceral scopula.

Ecology

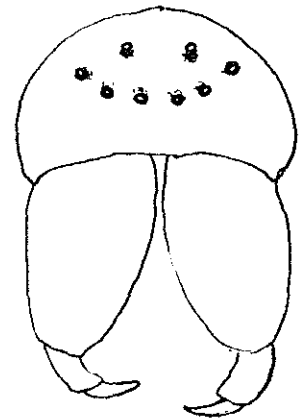
Herbage, bushes and young trees. Especially on Molinia caerulea - purple moor-grass.

Distribution

More frequent in South, but recorded from Yorkshire and Northumberland.
Locally distributed.

Figure 12.

Picrommata virescens



anterior view

THOMISIDAE

(37 species)

All members of this family are crab-like in appearance. The species fall into two sub-families;

Misumeninae; Legs I and II longer than III and IV, chelicerae with no teeth.

Philodrominae; Legs approximately equal, chelicerae with one tooth on I.m.

Misumeninae genera;

Thomisus; Lateral eyes on conical protruberances, figs. 13c,d Isp.

Pistius; lateral eyes on shallow protruberances, Isp.

Oxyptila; Laterals as pistius, Med.Oc.Trap. longer than broad, clavate hairs, fig. 13g, 9 sp.

Oiaea; Eyes as Oxyptila, setaceous hairs. Isp.

Misumena; Laterals as Pistius, Med.Oc.Trap. square or broader than long, ant. meds. = in size to ant. lats. some spines on carapace. Isp.

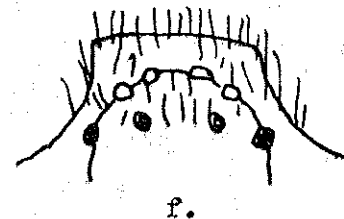
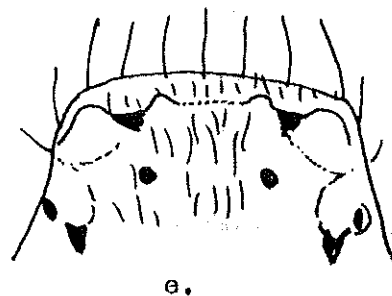
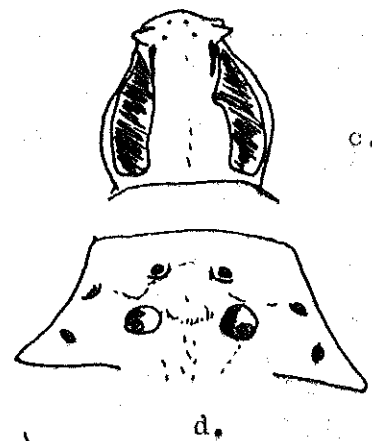
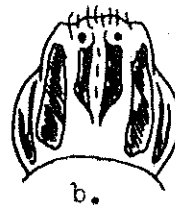
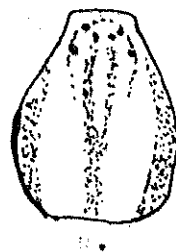
Xysticus; Eyes as Misumena except ant. meds. approx $\frac{1}{2}$ diameter of ant. lats. Ant.meds. closer to lats. than to each other. Many spines on carapace figs. 13b, e,j. II spp.

Philodrominae genera;

Philodromus; Post eyes slightly recurved, meds. further apart than from lats, fig. 13f. 8 sp.

Tibellus; Post eyes strongly recurved, meds. nearer than to lats. (Figs. 13a, i), carapace longer than wide 2sp.

Thanatus; Post eyes strongly recurved and post. meds. nearer or equidistant than to laterals, (fig. 13h) carapace scarcely longer than wide. 2sp.

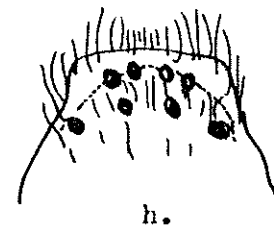
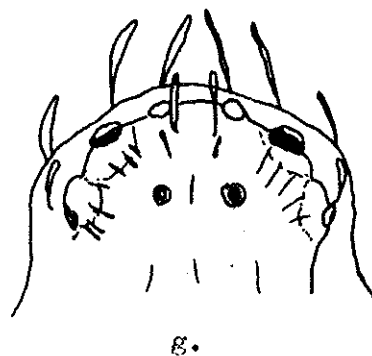


dorsal view:

- a. Tibellus maritimus.
- b. Xysticus ulmi (f.)
- c. Thomisus onustus (f.)

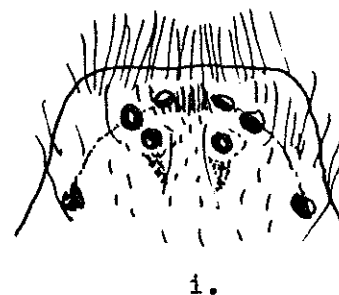
eye arrangements

- d. Thomisus onustus (a.)
- e. Xysticus
- f. Oxyptila
- g. Philodromus



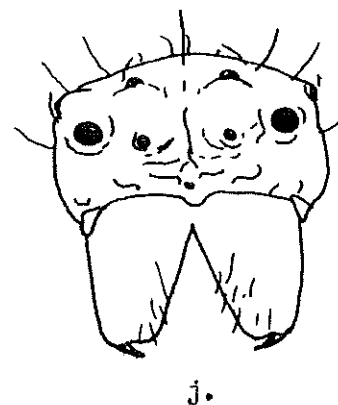
eye arrangements:

- d. Thomisus onustus (a.)
- e. Xysticus
- f. Philodromus
- g. Oxyptila
- h. Thanatus
- i. Tibellus



frontal view

- j. Xysticus



SALTICIDAE

(32 species)

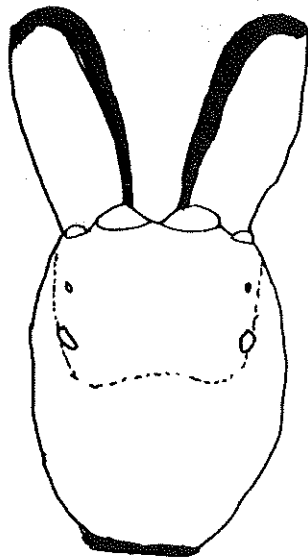
The family of jumping spiders have square or rectangular carapaces with four large, forward-pointing eyes. There are 17 genera separated on the eye arrangement:

Occular trapezium slightly longer than broad.....	<u>Synagales</u>
Occ. trap. slightly broader than long	<u>Myrmarachne</u> (figs 1, 2, 3)
Occ. trap. much broader than long, legs without spines	<u>Sallicus</u> (figs. 1, 2, 3, 4)
" " " " " " , legs with spines	<u>Phlegra</u>
" " " " " " " " "	<u>Aelurillus</u>
Occ. trap. broader behind than in front	<u>Ballus</u>
Post. eyes almost $\frac{1}{2}$ way along carapace	<u>Bianor</u>
Post. eyes $\frac{1}{3}$ way along carapace	<u>Pellenes</u>
" " " " , sternum narrow in front	<u>Marpissa</u> (fig. 14)
" " " " , sternum not narrowed	<u>Hycia</u>
" " " " " " "	<u>Neon</u>
Post. eye diameter = ant. lat. eye diameter	<u>Hisarius</u>
Post. eye diameter less than ant. lat. diameter	<u>Evarchus</u>
Carapace very squat	<u>Attulus</u>
Carapace less squat	<u>Sitticus</u>
" " " " " " "	<u>Euophrys</u> (fig. 14)
" " " " " " "	<u>Heliophanus</u> .

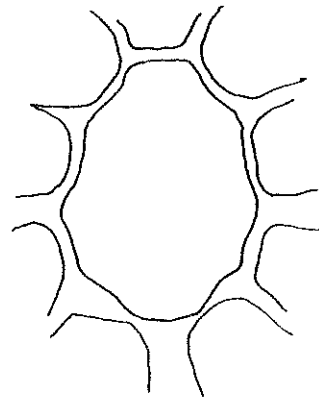
The Key of Locket and Millidge (1951) is particularly useful for this family.

Figure 14.

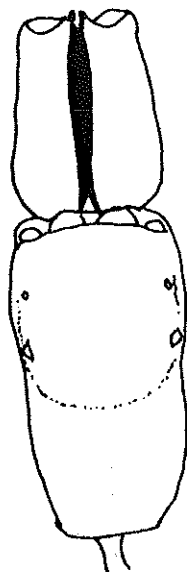
SALTICIDAE



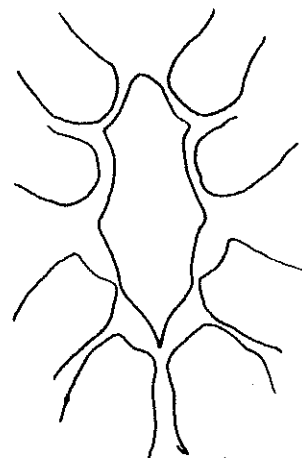
a. Salticus scenicus (n.)



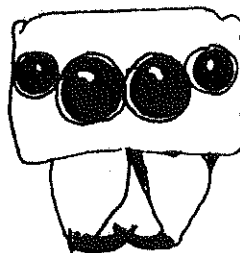
b. Parpissa steinum



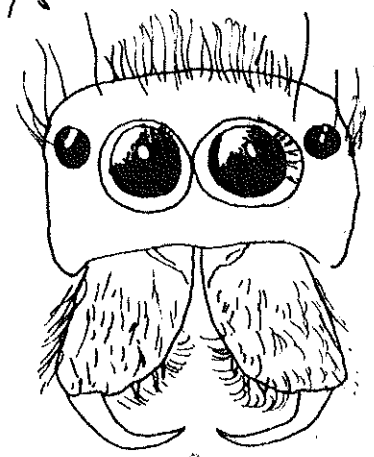
d. Myrmarachne formicaria



c. Myrmarachne formicaria
sternum



f. Euopheys frontalis
e. Salticus



e.

OCYOPIDAE

(1 species)

The family is common in the tropics, but there is only one British representative.

Oxyopes heterophthalmus Latrielle

Length: f. 5-6mm. m. 5.5-6.5mm.

Carapace: (fig. 15a) dark brown and cream, normal and scale like hairs.

Eyes: 8, (fig. 15b)

Sternum: Brown with longitudinal yellow stripe.

Chelicerae: Conical, tapering.

Ecology

Between flowers, shrubs and particularly heather.

Distribution

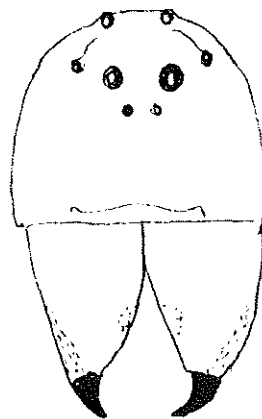
Sheltered places in Brockenhurst, Lyndhurst and Mark Ash (New Forest) and, in 1959, found by Hammond in Surrey.

Plate 15

OXYPIDAE : Oxyopes heterophthalmus



a. dorsal view of carapace (a.)



b. frontal view

LYCOSIDAE

(37 species)

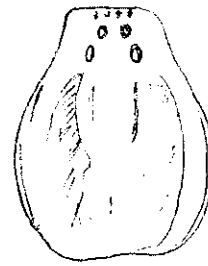
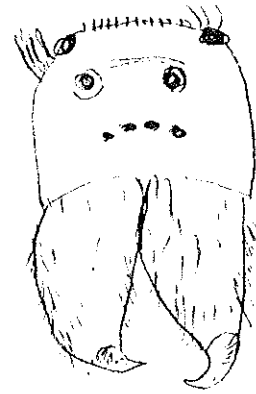
The wolf spider family includes the notorious South Italian Tarantula. Most members of the family are similar in appearance and species are usually separated on the shape and arrangement of the eyes and genitalia differences.

Ant. eyes strongly precurved	<u>Aulonia</u>
Ant. eyes not strongly precurved, head elevated with almost	
vertical sides	<u>Lycosa</u> (fig. 16a,
" " " " " head not elevated with	
sloping sides	<u>Tarentula</u>
" " " " " " " "	<u>Xerolycosa</u>
" " " " , carapace dark with no light band ...	<u>Arctosa</u>
" " " " , carapace with 'V' shaped marked	<u>Pirata</u> (fig.16e)
" " " " , carapace with median light band	<u>Trochosa</u> (fig.16c)

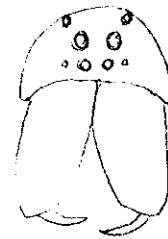
Figure 10.

LYCOSIDAE

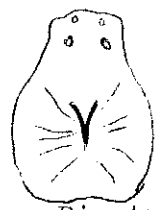
a. anterior view of Lycosa



c.
dorsal



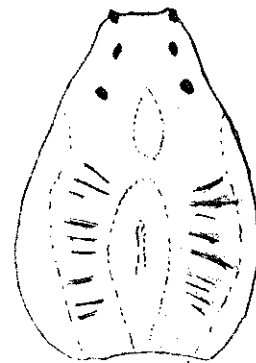
d.
anterior



e. Pinnata

Trachosa

b. dorsal view of Lycosa



PISAURIDAE

(2 or ? 3 species)

Family Characters

Eyes: 2nd row much shorter than third row.

Pisaura mirabilis (Clerck)

Length: f. 12-15mm. m. c12mm.

Carapace: reddish-brown with yellow stripe. Fovea with radiating striae. Small hairs, difficult to see in spirit.

Ecology

Long grass, heather, open woods.

Distribution

Common, whole of Britain.

Dolomedes fimbriatus Latrille

Length: f. 13-20+mm. m. 9-13mm.

Carapace: deep brown with two yellow or white bands near margins. Markings are partly due to hair colours and are less striking in preserved specimens.

Ecology

Swamps, pools and streams.

Distribution

Widespread in Britain, but local.

Dolomedes plantarius

(Specimens found in Blackwall's collection, but these might be foreign.

D.plantarius has been collected in East Anglia in 1956. Differs from D.fimbriatus in possessing wider cephalothorax with relatively narrower pale bands. Definite identification based upon shape of reproductive organs.

AGELINIDAE

(24 species)

The family includes the common house spider, Tegenaria.

Ant. eyes contiguous, post.eyes similar	<u>Argyroneta</u>
Post. eyes in strongly procurved row	<u>Tetrax</u> (figs. 18d,e)
Both rows of eyes procurved	<u>Agelena</u>
Both rows not or slightly procurved, front carapace narrowed ..	<u>Tegenaria</u> (figs. 18a, b, c)
Carapace front much broader	<u>Amaurobius</u> (fig. 18c)
Ant. row of eyes strongly procurved (from front)	<u>Cryphoea</u>
Ant. row of eyes straight or nearly straight	<u>Cicurina</u>
Ant. med. smaller than others	<u>Tetrilus</u> (figs. 18i, j)
" " " " "	<u>Tuberta</u>
Ant. meds. = to or greater than post. med	<u>Anistea</u>
Ant. meds. smaller than post. med.	<u>Hahnia</u> (fig. 18h)

AGELELNIDAE

Tegenaria

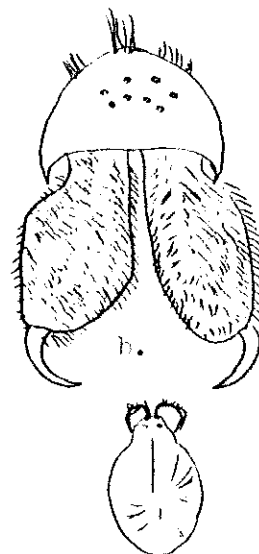
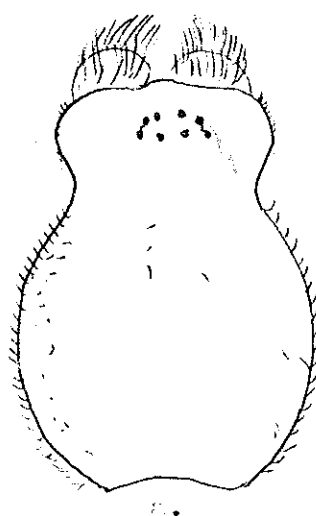
- a. dorsal view
- b. anterior view

Amaurobius

- c. dorsal view

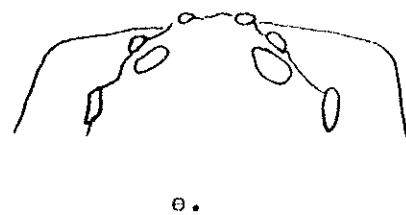
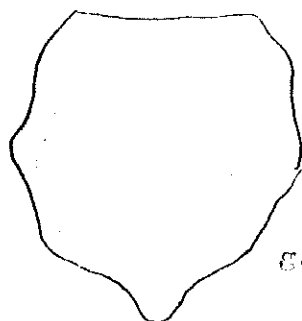
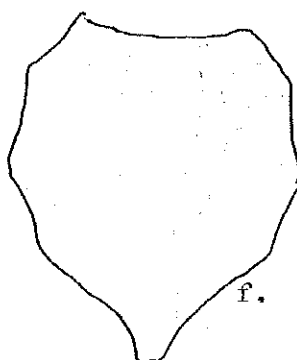
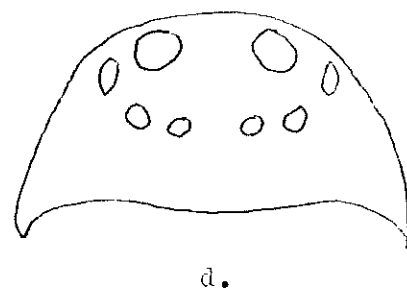
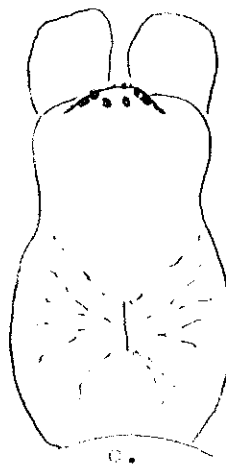
Tetrix

- d. anterior view of eyes
- e. dorsal view of eyes



Sternum

- f. Tegenaria domestica
- g. T. atrica

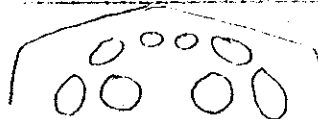


Eye arrangements

h. Mahnia nava

i. Tetrilus macrophthalmus or j. T. scioticus

k. Antistea elegans



MIMETIDAE

(3 species)

Characters of family

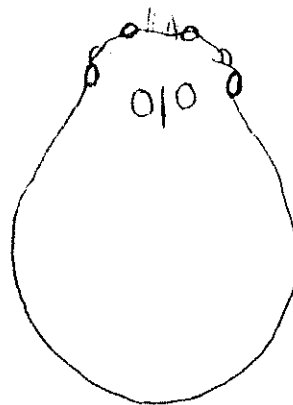
Carapace: elevated in middle (fig. 19b) with small circular depression in thoracic region.

Eyes: 8, lats. on eminences, (fig. 19a)

Sternum: Longer than wide.

Chelicera: Long, vertical and parallel sides, stridulating ridges on o. surface.

Species: E.Cambridgei Kulczynski, furcata (Villers) and tuberculata (Degeer).
separated on genetalia.



a. dorsal view of carapace



b. lateral view of carapace