

Hymenoptera by Venation

Compiled by Hilary Bedford

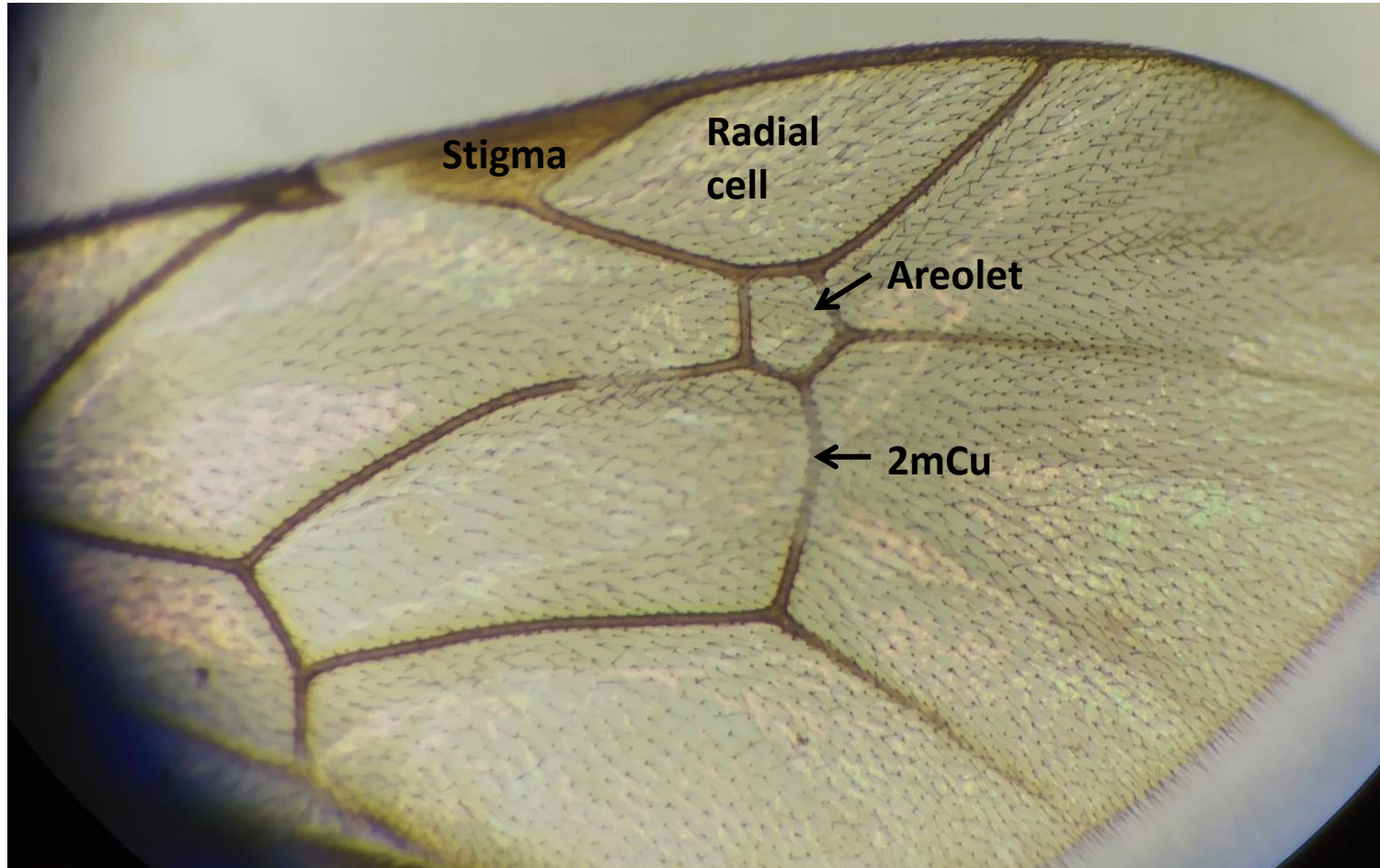
Introduction

Many families of hymenoptera can be recognised by their venation. This guide does not pretend to be comprehensive, and only includes parasitic groups. It should enable you to have an idea of which family your specimen is in and so which key to use to try and identify it. Some available keys are given at the end.

Other features may be needed in some cases, if so these are included in this guide.

The photos are in order of reduced venation

Ichneumonidae

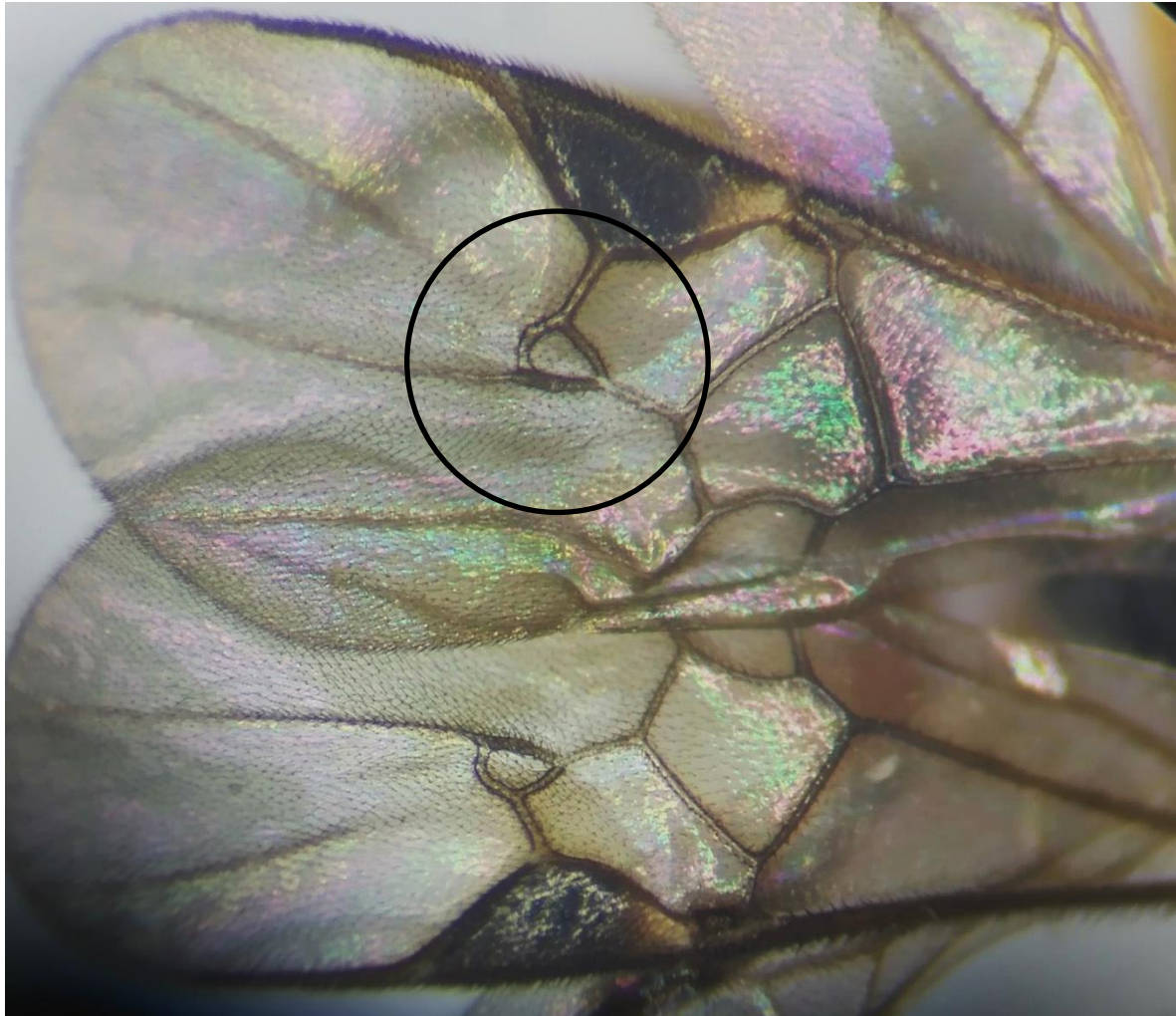


Braconidae



All Braconidae lack vein 2mCu

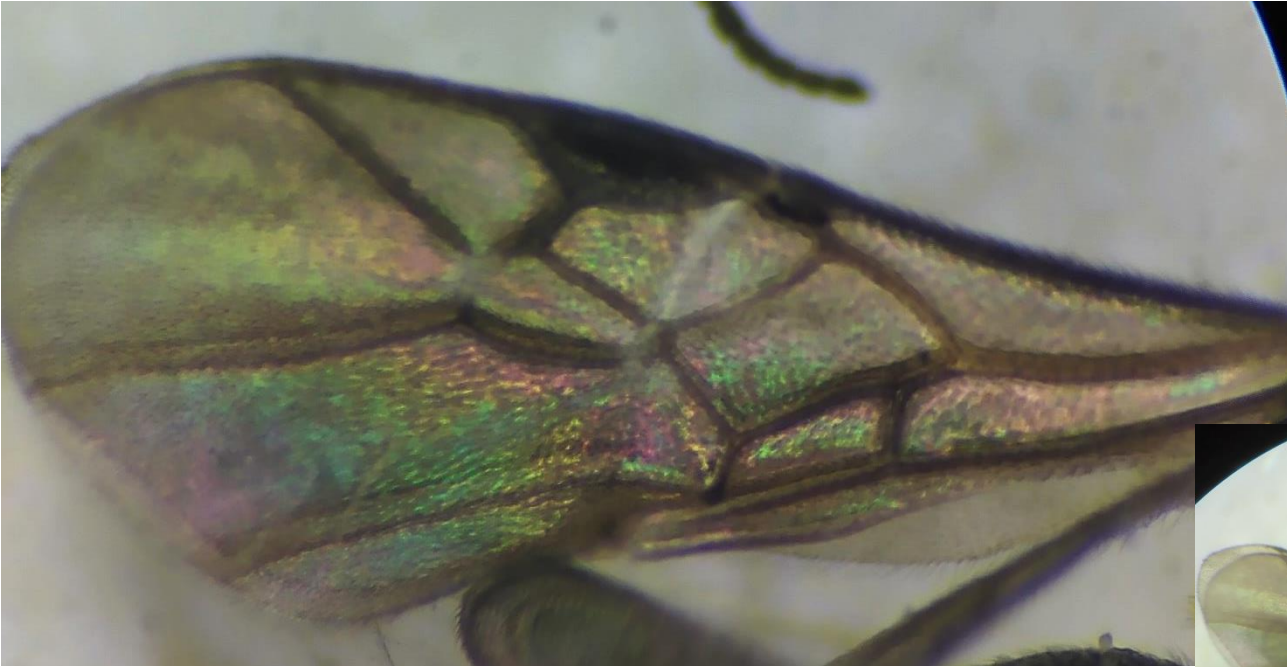
Braconidae (Microgastrinae)



Aphidiidae



Cheloninae (Braconidae)



Abdomen in the form of a carapace



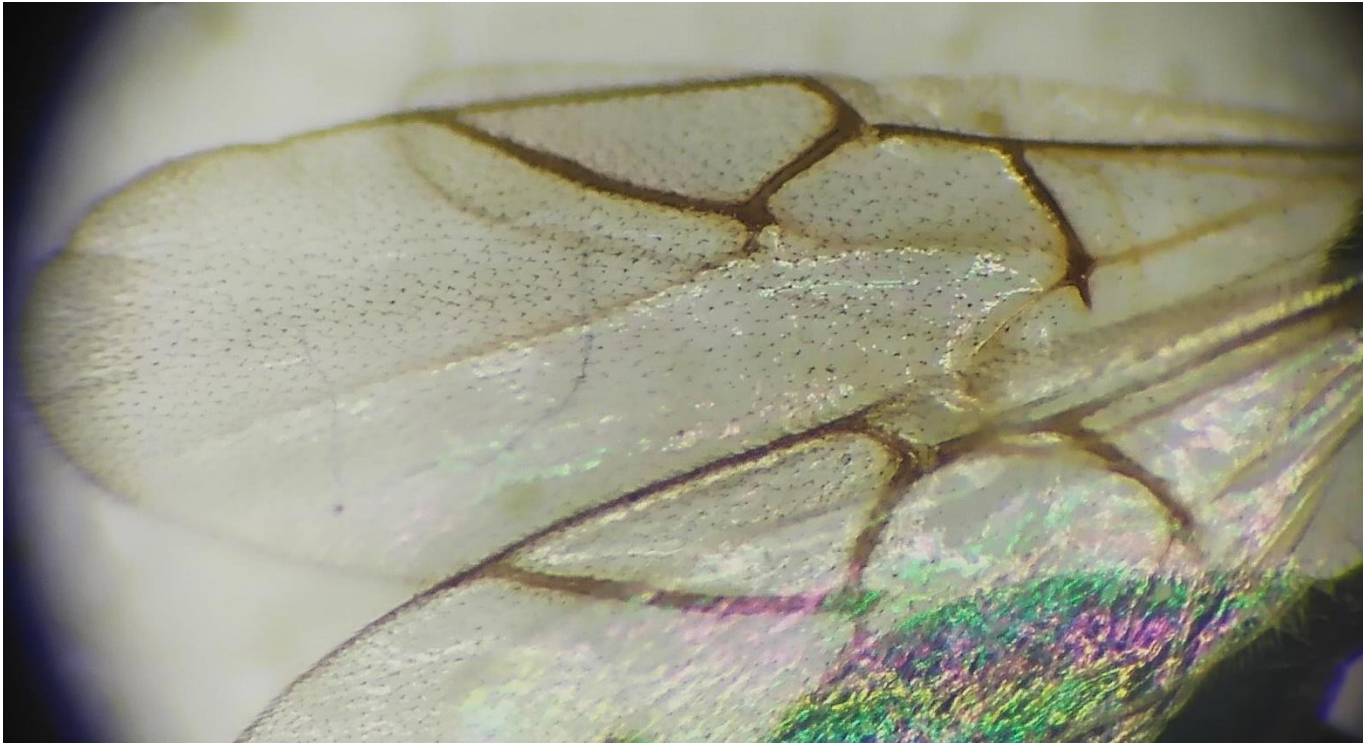
Whole insect

Gasteruptiidae

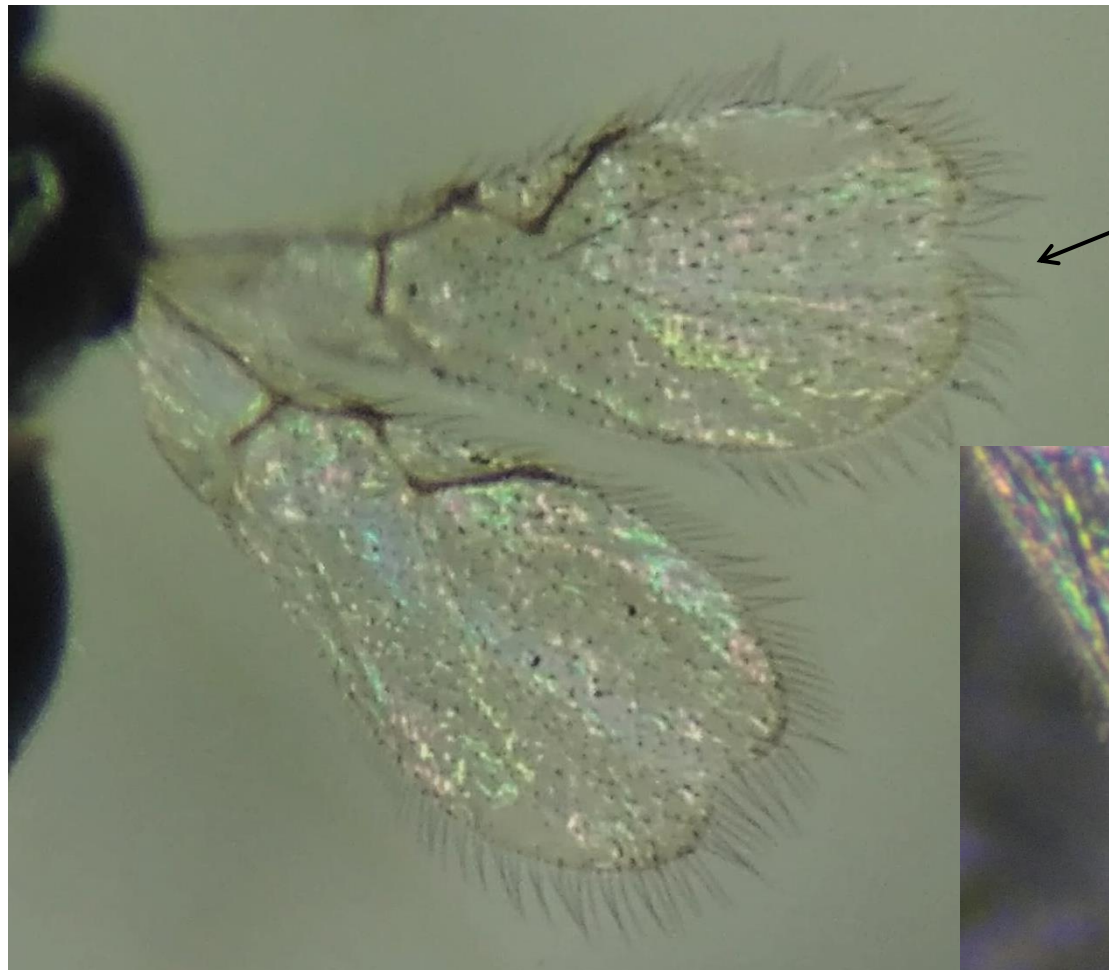


Abdomen inserted
high up on
propodeum

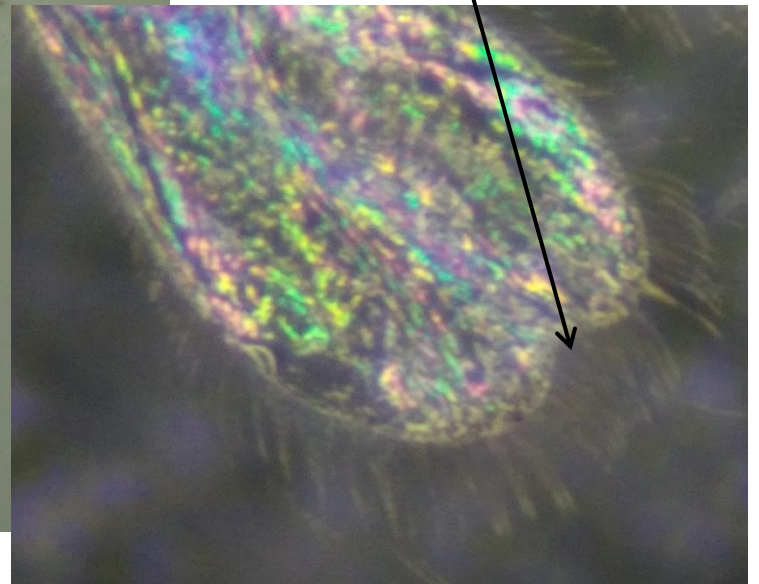
Cynipidae



Kleidotoma (Cynipidae, Eucoilidae)



Note indented wing tip
and long hair fringe



Diapriidae (Diapriinae)

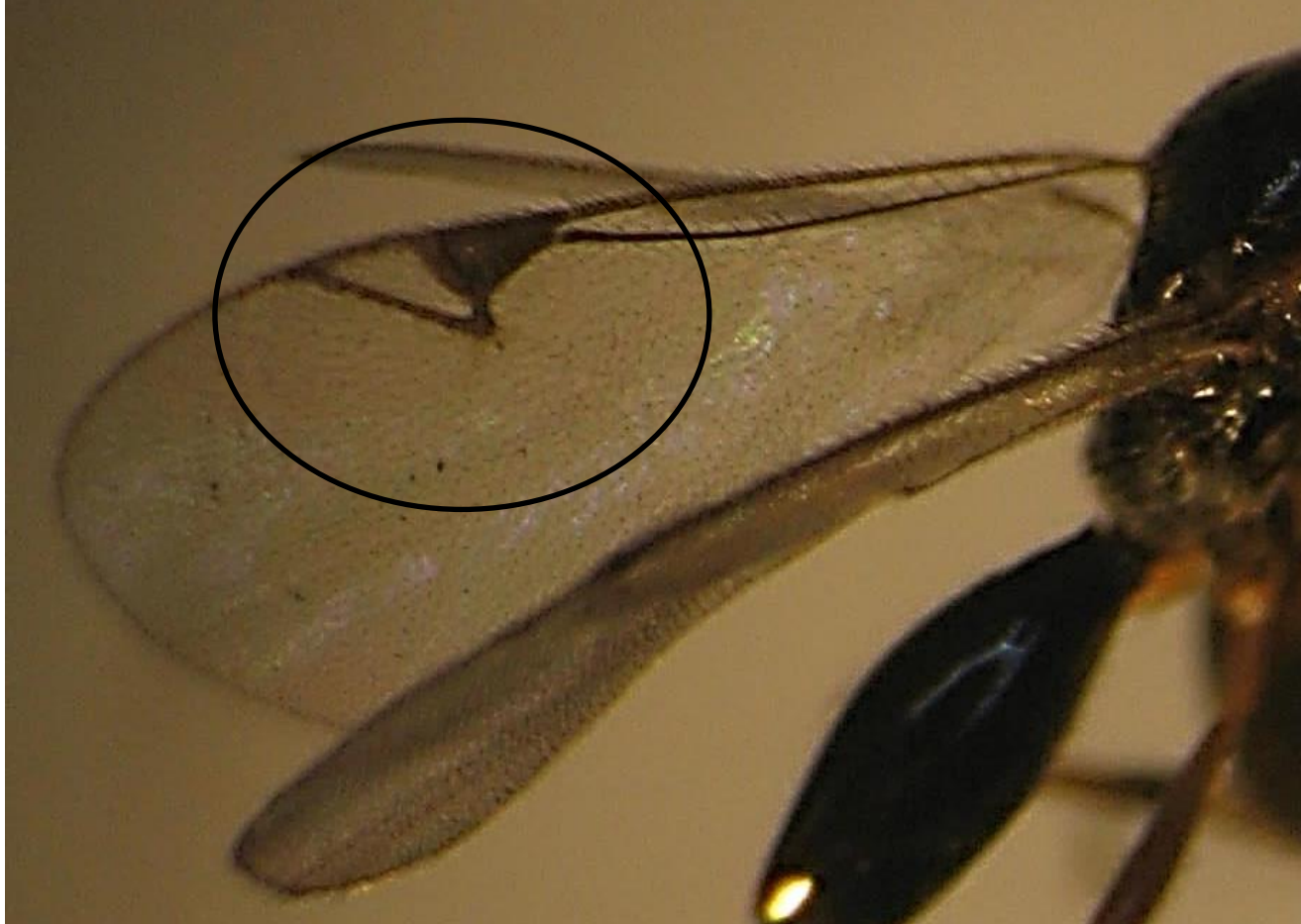


Antennae usually on frontal prominence opening upwards

Diapriidae (Belytinae)



Proctotrupidae (Serphidae)



Ceraphronidae



Megaspilidae



Dryinidae



Fore tarsus
on female

Chalcidae

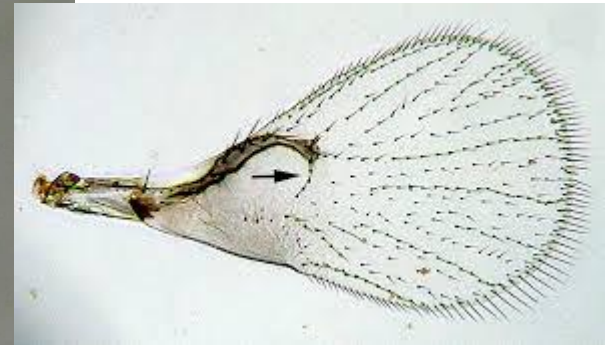


Scelionidae



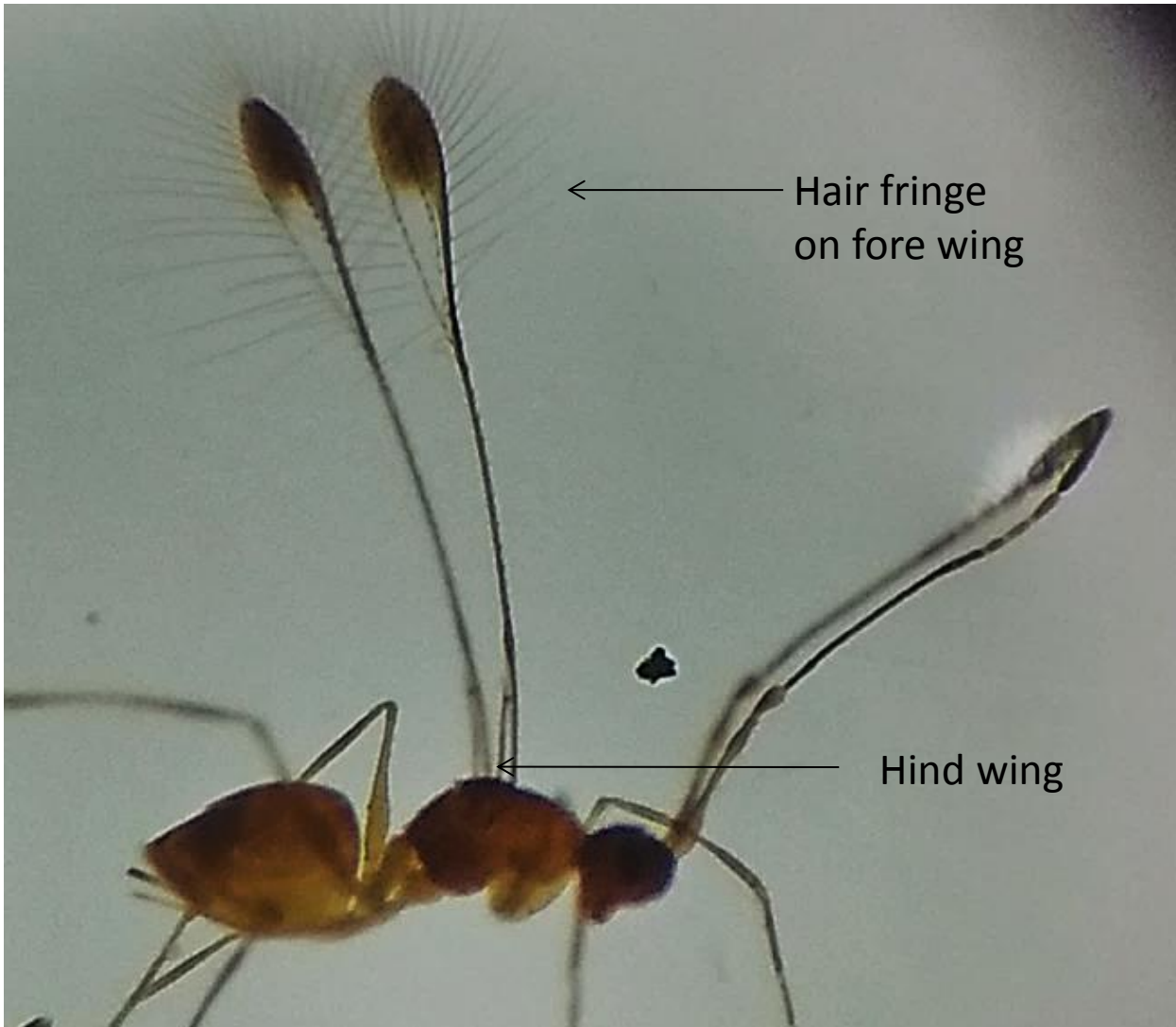
The venation here is similar to the Chalcidae but the insects are generally black, highly sculpted and usually small (1-2mm)

Trichogrammatidae



Whole insect <0.5mm. Hairs on wing in lines

Mymaridae



Tiny insects, often called fairy flies, ($<1\text{mm}$) with hind wings often very reduced and fore wings with a fringe of long hairs

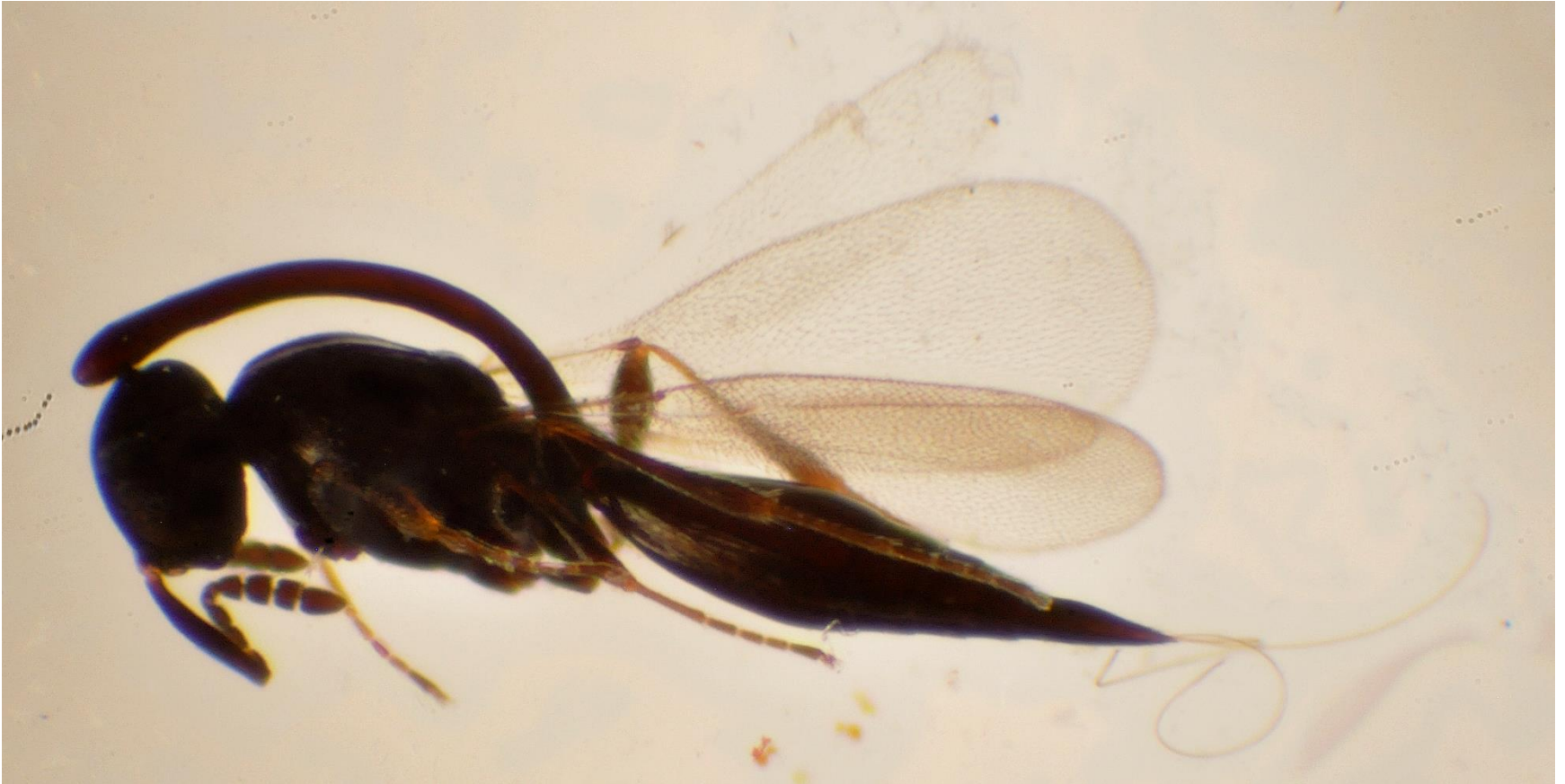
Platygastridae



Generally very small insects with no venation.

Antennae often appear folded with a long scape

Platygastridae (Inostemma)



Inostemma is unique in that the ovipositor is retracted into the 'horn'

Resources

- RES out of print publications, Volume 8 ; keys to several groups but a bit out of date.
- Braconidae; Keys to the Insects of the European part of the USSR
- Pteromalidae: Graham The Pteromalidae of North Western Europe (downloadable 969 pages)
- Some more recent publications;
- Ichneumonoidea; Ichneumonid wasps, their classification and Biology, Broad, Shaw and Fitton
- Banchini; J P Brock. The Banchine wasps of the British Isles
- Many keys to individual genera can be found on the internet.