

Key to some families of Odonata

There are 2 suborders of Odonata that you need to be able to recognize, **Anisoptera** and **Zygoptera**. These suborders and several of their families may be separated by the following characters:

1. Front and hind wings similar in shape, both narrowed at base (**Fig. 1**); head *transversely elongate* (damselflies) (s.o. **Zygoptera**) **2**
- Hind wings wider at base than front wings (**Fig. 2**); head not usually transversely elongate. (dragonflies) (s.o. **Anisoptera**) **4**
2. 10 or more *antenodal cross veins* (= **an**, Figs. 1,2); wings not *stalked* at base; wings often with black or red markings **Calopterygidae**
- 2(-3) antenodal cross veins; wings stalked at base, hyaline or lightly tinged with brown **3**
3. Vein M_3 arising nearer *arculus* (= **arc**, Figs. 1,2) than *nodus* (= **nod**, Figs. 1,2). **Lestidae**
- Vein M_3 arising nearer nodus than arculus **Coenagrionidae**
4. *Triangles* (= **tri**, Figs. 1,2) in front and hind wings similar in shape and equidistant from arculus; most of costal and subcostal cross veins not in line; usually a brace vein (oblique cross vein) behind proximal end of *stigma* (= **st**, Figs. 1,2) **5**
- Triangles of front and hind wings dissimilar in shape; triangle in front wing farther distad of arculus than triangle in hind wing; no brace vein behind proximal end of stigma; most costal and subcostal veins in line **Libellulidae**
5. No *brace vein* behind proximal end of stigma **Cordulegasteridae**
- Brace vein behind proximal end of stigma **6**
6. Eyes in contact dorsally for a large portion of head length **Aeshnidae**
- Eyes separated for entire head length *or* only touching at a single point; abdomen often club-shaped at apex **Gomphidae**

Terms to remember:

anal loop: group of cells in hind wings of dragonflies between Cu_2 , 1A, and 2A, which maybe rounded, elongate, or foot-shaped.

antenodal crossveins: crossveins along the costal border of the wing, between the base of the wing and the *nodus*, extending from the costa to the radius.

arculus: basal cross vein between radius and cubitus.

brace vein: a slanting cross vein; in Odonata, a slanting cross vein just behind the proximal end of the stigma.

nodus: strong cross vein near middle of costal border of the wing.

stalked (= petiolate): with a narrow stemlike base

stigma: (plural = stigmata) thickening of the wing membrane along the costal border near apex.

transversely elongate: wider than long

triangle: small triangular cell or group of cells near base of wing.

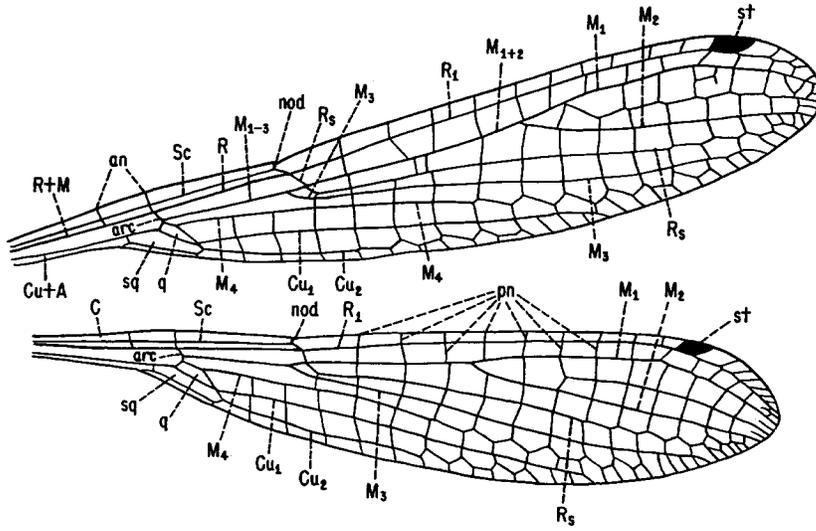


Figure 1

Figure 2

