**Identifying Drosophila suzukii**

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Drosophila suzukii female

IMPORTANT: This is a dichotomous key. Dichotomous keys only work properly when specimens are worked through the key step by step. Characters cannot be taken from the key and used independently. Doing so will result in misidentifications.
1. a. Two wings and two halteres (Figure 1a).............................. 2
   b. Either four OR no wings. No halteres....................Not a fly

2. a. Red eyes.................................................................3
   b. Eyes other than red............................................not *D. suzukii*
3. a. Wings clear (Figure 3a1) or with a dark spot near the end of the leading edge of the wing on first vein (Figure 3a2)……….4

b. Wings with bands, multiple spots, with a crossvein with a darkened “cloudy” area around it (Figure 3b1), or a spot at the tip of the wing on second vein (Figure 3b2)………….not *D. suzukii*
Figure 3a2  
*D. suzukii* male

![Image of D. suzukii male wing](image)

- 1st vein
- 2nd vein

Figure 3b2  
*S. terminalis* male

![Image of S. terminalis male wing](image)

- 1st vein
- 2nd vein
4.  
a. Short, stubby antennae with branched arista (Figures 4a)  
……………………………………………………………………………………………………………………………5  
b. Long antennae or short stubby antennae with an unbranched arista (Figure 4b)  
…………………………………………………………not D. suzukii  

5.  
a. Length under 4mm (~1/8”)  
…………………………………………………………………………………………………………………6  
b. Length over 4mm  
…………………………………………………………not D. suzukii
6. a. With single dark spot near wing tip…………………………………
………………………………………………..D. suzukii male (Figure 6a)
b. Without spot near wing tip……………………………………………….

**Drosophila suzukii male character summary:**

1. Light yellow or brown fly with red eyes.
2. Dark spot on the leading edge of the wing near the tip, centered on the first major wing vein.
3. Markings consist of bands at the ends of abdominal segments. These bands are unbroken.
4. Front feet with two combs each. Combs with 3 to six teeth. Teeth of combs parallel to the length of the foot.
7. a. Without combs on feet (Figure 7a) ...................... 8 (females)

b. With one (Figure 7b1) or more (Figure 7b2) combs on front feet or with male genitalia (Figure 7b3) ........... 10 (males)
8. a. Large sclerotized (hard, shiny and dark), ovipositor with strong serrations or teeth (saw-like edge when fully exposed) (Figure 8a) .......................................................... 9

b. Small soft ovipositor sometimes with weak serrations or teeth (Figure 8b). ............................................................... NOPE
9. a. Teeth on ovipositor much darker than the rest of ovipositor (Figure 9a1, 9a2).
    The body is free of stripes, spots, or patterns except for complete dark bands (no breaks) at the end of abdominal segments (Figures 9a3, 9a4). The last segment is sometimes all dark brown………
    ..........................................................\textit{D. suzukii female} (Figure 9a5)

b. Teeth on ovipositor the same color as the rest of the ovipositor (at most slightly darker) (Figure 9b1, 9b2) 
    OR body with stripes, spots, or patterns other than above (Figure 9b3) including a break in the center of the abdominal bands (Figure 9b4)…………
    ..............................................................................................................................................NOPE
Figure 9a3, D. suzukii

Figure 9b3
D. buskii

Figure 9a4:
D. suzukii female

Figure 9b4
Drosophila suzukii female character summary:

1. Light yellow or brown fly with red eyes.
2. Large, hardened, saw-like ovipositor with dark teeth.
3. Markings consist of bands at the ends of abdominal segments. These bands are unbroken.
4. No dark areas around wing veins.
5. No combs on front feet.
6. Smaller than 1/8” or 4mm.

Figure 9a5: D. suzukii female
10. Males.
   a. Front feet with a comb on first and second segments (Figure 10a).
   .................................................................11

b. Front feet with 1 (Figure 10b), three, or more combs on front feet
   ........................................................................not *D. suzukii*
11. a. Front feet with teeth of combs on first and second segments parallel to the length of the foot and combs with 3 to 6 “teeth” (Figure 11a1), End of abdominal bands with a continuous dark band and last segment often dark brown, otherwise the body and legs do not have notable markings……………**D. suzukii male** (Figure 11a2) *(These are rarely observed. Specimens keying here should be verified by an Entomologist).*

b. Front feet with teeth of combs on front feet perpendicular to the length of the feet or with more than 6 “teeth” (Figure 11b) OR body with patterns other than above (bands on body, split bands on abdomen, etc.)……………………………………not **D. suzukii**

![Figure 11a1. Teeth parallel to foot, D. suzukii male](image1)

![Figure 11b. Teeth perpendicular to foot](image2)
**Drosophila suzukii** “spotless” male character summary:

1. Light yellow or brown fly with red eyes.
2. Front feet with two combs each. Combs with 3 to 6 teeth.
   - Teeth parallel to the length of the foot.
3. Markings consist of bands at the ends of abdominal segments.
   - These bands are unbroken.
4. No dark areas around wing veins.
5. Smaller than 1/8” or 4mm.

*NOTE: All images have been taken from materials produced by Martin Hauser of CDFA unless otherwise noted.*