

Worksheet 1

LAMPYRIDAE:

Of about 2000 *Lampyridae* species, three are endemic in Europe.

Due to its lack of wings, the brownish female (15–20 mm) of *Lampyris noctiluca* looks similar to a larva. To find a mating partner, it sits on a blade of grass at dusk and raises its glowing abdomen. The dark-brown, winged male (10–12 mm) also has glowing spots on its abdomen. However, it is primarily attracted by the female's glow.

Male and female *Lamprohiza splendidula* can also glow. Females (10 mm) of this species have a brownish–yellow colour and cannot fly with their small wing stubs. The brownish males (8–10 mm) do have fully developed wings. While flying at night, males let their photophores (light-generating organs) light up rhythmically. If a female perceives the signal, it answers, causing the male to drop down.

Phosphaenus hemipterus, the third central-European species, lives in cracks in walls and gravelled areas. Females (10 mm) do not have any wings at all; males (6–8 mm) only have stubs. Light-emitting organs are barely developed in both sexes, thus sexual pheromones are primarily used to find a mate.

Task:

1) Why do fireflies glow?

2) Please complete the table:

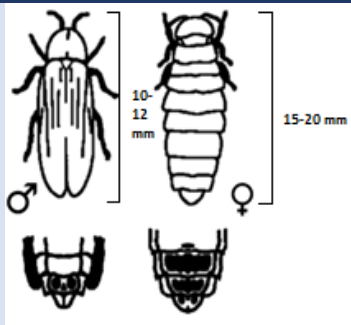
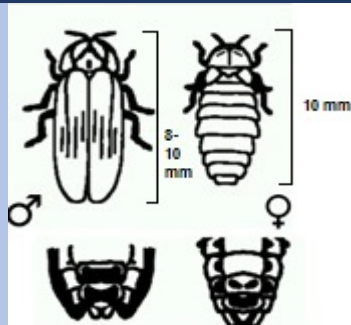
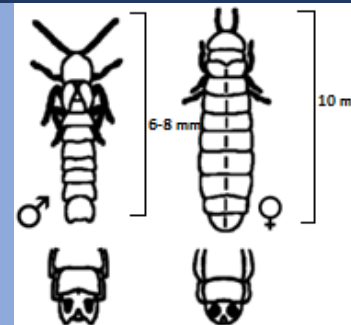
<i>Lampyridae</i> in Central Europe		
		
Name: <hr style="width: 80%; margin: 5px auto;"/>	Name: <hr style="width: 80%; margin: 5px auto;"/>	Name: <hr style="width: 80%; margin: 5px auto;"/>
Primarily glowing <input type="radio"/> male / <input type="radio"/> female	Primarily glowing <input type="radio"/> male / <input type="radio"/> female	Primarily glowing <input type="radio"/> male / <input type="radio"/> female

Figure adapted from <http://www.glowworms.org.uk/ident.html>. Three central European glow-worm species: how to recognise central European glow-worm species.