



HOW TO COLLECT BITING MIDGES

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<https://www.ucd.ie/netvecireland/>

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CULICOIDES BIOLOGY

LIFE CYCLE

EGG – LARVA – PUPA – ADULT

Culicoides biting midges have 4 different life stages, although the immature stages are the most critical ones as they need damp soil rich in organic matter to develop. To be able to lay eggs, females must have a blood meal.

HABITAT

ORGANIC MATTER DAMP SOIL

As mentioned before, immature stages develop in this habitat and adults are not good flyers, therefore, they remain close to the area where they emerged as long as there are host nearby.

TRAPS – ONDERSTEPSPOORT AND MINI CDC TRAPS

LURE

LIGHT

Both these traps use light as attractant for midges. However, there are many invertebrates attracted to light, therefore a small mesh can be placed to avoid collecting bigger individuals such as moths.

SYSTEM

SUCTION FAN

Right below the lightbulb a suction fan is placed so when the midges come closer to it they are sucked into the collection container (usually a beaker with soapy water).

TIMING AND FREQUENCY

TIMING

TWILIGHT TO DAWN

Culicoides midges are crepuscular insects with an activity peak at twilight and dawn. Therefore, traps can be set overnight.

FREQUENCY

TWICE A MONTH

To get a nice representation of the species distribution and abundance in a site, it is recommended to collect twice a month (every 2 weeks) for one year. Despite biting midges are not active during winter months, the inactive window can vary from year to year as it is dependent on climate, not on a calendar.