

# Bats, an ally to keep the moth population under control



## What is it?

Enhanced biological control of *Lobesia botrana* by establishing bat shelters in the vineyards. *Lobesia botrana*, popularly known as the grapevine moth, is an insect that favours botrytis damage in vineyards.



## How does it work?

### Biodiversity

### Biocontrol agents

Bats are very voracious! They are able to ingest from 80 to 100 % of their weight every night. Studies show that they may eat between 1,500 and 3,000 insects per night, including grapevine moths, that are part of their diet. Encouraging the presence of bats in vineyards helps to control their populations and reduce the damage caused to the grapevines.

## Results

Encouraging the presence of bats in vineyards is a double win: It helps control pests and contributes to the protection of bat species! Bats also complement the use of mating disruption methods, a sustainable alternative to avoid grape moth damage to vineyards, with a lower impact on biodiversity than insecticides. For the use of diffusers to be successful, they must be used in an area of at least 4 hectares. For smaller surface areas bat shelters can be a great help.

## Cost – Cost-efficiency

- Requires no financial investment. Farmers can build their own shelter boxes out of wood.
- In a short period of time and with little effort, a new biocontrol agent will help you prevent damage in the vineyard.

## Recommendations for placing the shelters

- **HEIGHT:** The minimum height for placement is 4 metres, the optimum range is between 4 and 8 metres.
- **SUPPORTS:** Facade or wall, tree or post. The most important thing is that the nesting box can be seen easily and there are no obstacles such as branches or walls to hinder entry.
- **ORIENTATION:** The nest box should not be placed on a west-facing facade (for warm climate zones) as the bats could die from overheating on hot days.