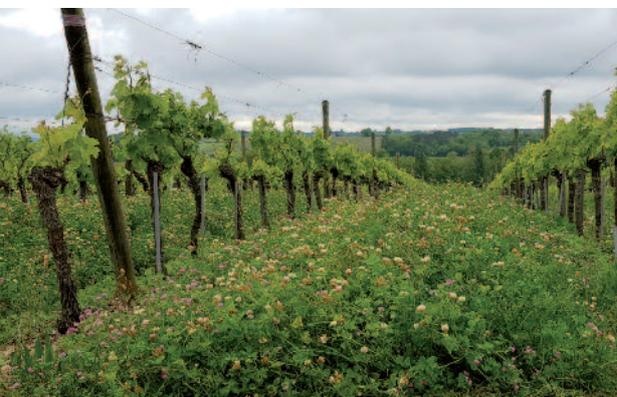


Chiroulet is committed to a more sustainable viticulture

## What is functional biodiversity ?

Chiroulet is a family, a terroir, a cru and of course wines that you can appreciate! It is also an estate that is resolutely committed to the path of biodiversity. Explanations...



104 species of arthropods were counted on the domaine, including this chrysope.



Functional biodiversity is the diversity of life that is useful for the farmer, so it's important that the operator is familiar with his own biodiversity in order to best use and preserve it. **At Chiroulet, monitoring of arthropods was carried out over two years, (2017 and 2018) and on two parcels of the estate.** In 2017, 104 species were identified including 25 species of spiders, 35 genera of parasitoid Hymenoptera, five species of bees and four species of lacewings, including a rare species called *Cunctochrysa albolineata*.

### Let the plants bloom to feed the insects

The hedges are plentiful all around the vineyards and the inter-row and border plants are left to flower in order to nourish the insects useful for the production of the vineyard. Indeed, if at the larval stage these invertebrates

consume the eggs and the tortrix moth caterpillars or even leafhoppers, at the adult stage, most of them need nectar and pollen. So for example, in lacewings, the more pollen the females consume, the more eggs they will lay that will give larvae. These are voracious predators of all insects that move around on the stems, leaves and fruits of the vine. **To encourage them, the Estate lets the bordering flowers bloom and in the inter-rows, the birdsfoot trefoil, the white and purple clover, teasels, Picris and other wild flowers.**

At the same time in certain plots, green plants for fertilizing have been sown inter-rows which favours the feeding of insects in the autumn and spring and also provides shelter in winter.

### Johanna Villenave-Chasset

Doctor in entomology and landscape ecology. Flor'Insectes



Biodiversity has become a true working philosophy at Chiroulet in recent years. **The study by Johanna Villenave-Chasset has guided us. She has highlighted important natural assets of the magnificent Côte d'Heux of which we are very proud.** We feel so much that our visitors are seduced by this bucolic environment. So much so that the English are used to calling this little part of Gascony, "the little Tuscany"...

This study has nonetheless shown shortcomings in this agro-ecological crown, particularly in proximity to

the streams. A little like if there was a clearing in the wood. Some plots, particularly the new plantations, will be susceptible to a lack of auxiliary fauna as there is a lack of vegetal support

The decision to therefore invest in planting more than 300 metres of biodiversity hedges integrating several species of shrubs that will sustain a wide variety of wildlife (pollinating insects, birds, and predators of grapevine parasites). This period of the estate's life is very exciting, firstly because of the beauty of

planting trees and secondly as it makes us proud to recreate an ecosystem that once existed

By looking at old black and white photos in the evening with the family,

these are places that there were once wooded areas or hedges that were ripped up in the 1970s to mechanise and intensify production methods.

The opposite is happening today... as if the story has started a new cycle!

**Philippe Fezas**

