A **PRAGMATIC** SHIFT

David Guy

Farmer near Nantes

WHEN I MOVED to this 170-hectare farm north of Nantes, I didn't give much thought to my use of pesticides and fertilisers. I would make an appointment with the cooperative's technician, who would provide me with both the products and recommendations, and it worked.

As it happens, I am not the son of farmers: I had bought the farm and had to pay it off, which left me with very little budget to buy fertilisers and pesticides. So I sought to reduce the use of these products for pragmatic reasons, not out of dogmatism. It was only later that I realised that this had agronomic benefits: using fewer products is good for soil and plant health. Today, I don't use them at all.

To achieve this, I used several techniques. The basis is to integrate new crops into the rotation. If you always grow the same crops, you systematically reinforce the same insects, the same diseases and the same grasses (commonly referred to as 'weeds')... and so you always use the same pesticides. Eventually, you encounter resistance, like when an antibiotic no longer works on a bacteria. I face this problem, for example, when I plant ray-grass, a grass that causes me a lot of trouble. In my opinion, this resistance shows that we have no choice: we will have to find alternatives. For my part, the farm I took over was growing wheat as a monoculture. I quickly switched to five different crops: buckwheat, a little grain maize (for livestock feed), sunflowers, spring lupins... In 2016, I even switched to organic farming, producing a total of a dozen crops! I must say that I am fortunate to be able to sell my crops to a cooperative, Terrena, which has set up outlets to sell everything – even oats for breakfast cereals. Without the right outlets, it is impossible to diversify crop rotation (the different types of crops on the same farm).

Another important change has been soil cover: if you leave a field bare after harvesting, it will fill up with weeds. With plant cover, I choose what to "cover " this space with – for example, mustard, legumes, cruciferous vegetables, etc. This reduces weeds and therefore the amount of herbicides I use in the end.

Thanks to cover crops, I have also reduced my use of insecticides, for example in rapeseed: I have gone from three treatments per year to none! This is due to the 'associated rapeseed' system, pioneered by France. This involves sowing plants such as field beans, buckwheat or clover at the same time as rapeseed. It grows in the middle of all this, and the insect that normally attacks it in the autumn, the flea beetle, doesn't realise that it's a rapeseed field. The plants camouflage other plants! These new approaches require specialised equipment, such as a seed drill capable of sowing different seeds in the same furrow, and even at different depths. With these different techniques, I have greatly reduced my use of insecticides and herbicides. For fungicides, the change has come more from advice and monitoring: I observed my fields closely before deciding whether or not to treat them. For wheat fusarium, for example, I looked at which leaves were affected by the fungus, how the weather was going to develop... If it wasn't overly worrying, I didn't treat it.

When I started this 'soil conservation' farming, people thought I was a bit crazy. It's psychologically essential to exchange ideas with farmers who are committed. I'm part of the Base association, created in western France, and a conservation agriculture network. We visit farms, do field tours, and invite experts from other countries… Surrounding yourself with support matters, because without chemical products, the mental burden is greater. You need to be very skilled technically, more of an agronomist than a traditional farmer: acting at the right moment, almost the precise hour, especially with climate change testing our nerves. We need knowledge, advice, and training… And it has become even more complex since I made the leap to organic. Last year, for instance, I lost 80% of my lupin to rot that developed a month before harvest. Had I been able to treat it exceptionally, I could have saved my yield! This is why I consider organic too radical; I lean toward compromise. To massively reduce pesticide use, farmers also need greater financial means: insurance for extremely poor harvests and, crucially, more added value when selling our crops – perhaps linking the price to pesticide reduction. We constantly discuss agricultural transition, but who carries the risk? Farmers. If we are asked to change, more money must be invested in what feeds people.

It is crucial, psychologically, to interact with farmers who believe in it

Conversation with HÉLÈNE SEINGIER

Illustration Stéphane Trapier