

Sheeps in arable rotations: a partnership between breeder and cereal producers



TESTIMONY

collected by Danaé GIRARD, Bio en Grand Est



Daniel STARK, cereal producer in Seebach



Lembach is about twenty kilometers from Seebach in the north of Alsace. However, it is in Bourg-lès-valences in the region Drome that Vincent HELBRINGER and Daniel STARCK have met each other, at the stand of the agriculture show "Tech&Bio" in 2020.

As Daniel was looking for innovations for sorting and drying grains, Vincent was there presenting his moveable chicken coops. We can say that it was a good opportunity to talk about... Grazing of winter covers and intercrops by sheep!



Vincent HELBRINGER, sheep breeder in Lembach



Where did this idea come from?

Daniel : « the idea has crossed my mind before but I did not know any interested farmer. »

Vincent : «From my side, the surrounding farmers prefer to grind their intercrops. But I couldn't find colleagues to try the experiment. I have transferred the animals from Lembach to Seebach in livestock vehicles over three trips. I couldn't find colleagues to try the experiment. I couldn't find colleagues to try the experiment. We left 32 ewe lambs from April 2020 to January 2021 at daniel's farm. They circulated on several land plots (about 10ha in total). »



concretely, how did you manage the rotation of the herd?



D : « We started with a patch of wheat/purple clover, the aim was to graze the clover and to depress the wheat. Then the animals turned on other land plots: temporary meadow (alfalfa), wasteland (spontaneous grass), a maize-based mixture test (soybeans, peas,...) that was inconclusive, multi-species mixtures (rye, barley, oats, peas). »



V : « I moved the herd on foot every 15 days on average. As these plots are not intended to accommodate animals, mobile electric fences are used. It is not a problem in terms of equipment and, for the moment, it has not increased my workload. It's like a mini transhumance each time. Daniel even participated once in moving the herds. he liked this experience as a shepherd »



D : « Yes! With the increased temperature of summer 2020, I filled the drinkers several time so that Vincent do not have to travel too often to Seebach. »



V : « It was a huge boost because the round trip takes about 1h30! even if I have chosen animals that did not require a lot of follow-ups, it was necessary for Daniel to be present. Another advantage of using land plots that do not have a breeding history is that they are free of pests. it follow-up was easier since I did not have to deworm the area. I must even say that they are the most beautiful lambs I have ever had ! they consumed far more legumes than they would have consumed on my natural grasslands. they were pampered at Daniel's farm who still has hedges on the edge of some land plots, which brought them the necessary shade the hot weather period. »

Cereal producer

Breeder

Benefits

Agronomic benefits of intercropping :
 Reduction of weed and pest pressure
 Reduction of soil erosion
 Refuge and resource for biodiversity
 Capture of soil and atmospheric nitrogen if legumes
 Improvement of soil structure

Economic gain and work time because it is easier to destroy/burial intercrops

Animal manure spread on the plot

Lower feed costs and forage harvesting/distribution costs.

Better animal health at lambing (reduced parasite pressure)

Fodder quality

Additional source of fodder

Disadvantages

Grass-legume mixes are less of a nitrate trap than mustard which is not eaten by sheep

Work time related to travel and monitoring

Depending on the state of the field: risk of lameness



What lessons have you both learned from this experience?



D : « It is necessary to anticipate and plan the arrival of animals at the end of winter. For this first experience, the sheep arrived a week before Easter 2020: it was a little too late compared to the development of wheat. »



V : « It is the problem of shearing animals that has prevented them from being moved earlier. I wanted to let the wool grow adequately and it was too right that year. For the next attempt, it is a point that we will anticipate. »



D : « The second parameter to improve is the number of animals and the duration of grazing of the land plot. During this first attempt, we realized that there were not enough animals to manage the development of the crops. The long stay caused damage to the wheat (eaten cobs/young shoots). In theory, depressing wheat stimulates cultivation. But it was done too late and too long. It was inconclusive. »



V : « It is also necessary to take into consideration the constraints at the end of winter: if the ground is too wet, there is a risk of stomping. »



Are you planning to try the experiment again?



D : « Yes, of course. Putting sheep on plots will prevent me from grinding. It saves a mechanical intervention. In terms of tillage (depending on the period - e.g. for summer cover), incorporating the droppings before the autumn crop is easier than the crushed cover but one essay is not enough to judge the advantage of fertilization by animals over the incorporation of organic matter, as I usually do. »



V : « I also want to continue this partnership. We will have to find the right circumstances and have more sheep. Even if it represents a greater workload for the farmer, it demands a lot of sheep that intervene quickly and for a little period on each land plot. In 2021, I was so busy trying to manage the grass on my own plot that we did not even try again with Daniel. Provision should be made for animals so they can be left all year round. In the long term, Daniel could systematically consider a share of temporary grassland in his rotation. And for me, the ideal would obviously be to group the land plots together. Perhaps by looking for other cereal producers who are in the same village to be part of the offer? »



D : « Moreover, another cereal farmer from Seebach proposed his lands following this experiment. I see this system as an opportunity to benefit for free from animal droppings and also to have animals on the farm. We could even imagine a breeder setting up a farm with this model: by letting the animals graze only on farms without animals. »

