



Monteforte - family farm



Michele & Domenico
Riu



50 hectares



improvement of
grassland management

NO-TILL SEEDING OF FORAGE MIXTURES IN HILLY PASTURES TO CONTROL SOIL EROSION

Agricultural hilly soils are often prone to erosion and soil degradation occurs especially when temporary crops that leave the soil bare for a long time are sown, as well as heavy-mechanization and traditional tillage are used, reducing yields and the value of lands. The use of conservative soil tillage can help solving this issue, controlling soil erosion. In Mediterranean livestock farms, the problem is particularly acute. A solution comes from the application of no-till techniques for seeding, possibly in combination with the cultivation of permanent pastures. Being partner of an Operational Group, a farmer could compare the benefits derived from no-till vs minimum soil tillage preceding the seeding of self-reseeding pasture mixtures in early November. In one case, he controlled weeds with glyphosate (0.5 l/ha) sprayed after a late-summer rain (20 mm)

that stimulated weed germination and then sowed; in the other case, he broke up the soil to 20 cm deep after rainfall, and then harrowed, seeded with a precision seeder.

DAP (150 kg/ha) was broadcasted before, and rolling was carried out after both seedings. Two tailored-made mixtures were used, differing only for the presence of barley or rigid ryegrass, in combination with clovers and herbs bought on the market. Both mixtures covered well the soil. No-tillage allowed a better control of soil erosion before and after the mixture establishment. The no-till technique has great potential, but it requires a general knowledge of its pros and cons in different environments and soils, as well as the suitability of the dedicated equipment to the specific farm conditions.

Farmer Interview

<https://www.youtube.com/watch?v=ztVslQf8kPc>



Photo credit: photos generated from farmer interview - Consiglio Nazionale delle Ricerche