



F.Ili Runchina- family farm



Nanni & Luigi
Runchina



140 hectares



grassland
management

ESTABLISHING AN INNOVATIVE PASTURE-MIXTURE BASED ON THREE FUNCTIONAL PLANT GROUPS AND SIX FORAGE SPECIES

Reducing variable costs and improving milk yield and quality are the objectives of farmers who sell their sheep milk to industries/cooperatives and receive a payment based on milk quality. The use of innovative forage mixtures based on complementary functional groups and self-reseeding species can help to meet these objectives. A functional group is a group of species that share the same characteristics within a mixture, i.e. legumes (L), grasses (G) and herbs (H) are distinct functional groups. Self-reseeding species can self-regenerate dense stands in following years without the need to till the soil each year. An example of a six-species and three-functional group based mixture was found in a Mediterranean farm. The forage species have a local origin and are well adapted to the soil pH of the farm (7.1): self-reseeding rigid ryegrass (G); self-reseeding burr medic and subterranean clover, and the short-lived perennial

Italian sainfoin (L); perennial plantain and chicory (H). Rigid ryegrass quickly covers the soil after seeding. Annual legumes are high-quality, especially during winter and early spring, and are adapted to be heavily grazed by sheep. Italian sainfoin is highly productive in drought-prone conditions and contains moderate levels of condensed tannins which mitigate methane emission. It also boosts milk production. Finally, plantain and chicory are tap-rooted drought-tolerant perennial plants rich in antioxidants and anti-inflammatories and contribute to the control of gastrointestinal parasites in lambs and sheep. All these species in the mixture, thanks to their attributes, contribute to reduce the use of fertilisers, chemicals and agricultural inputs and improve milk quality and cheese yield.

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Farmer Interview

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



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