Overwintering cover crop

Description of the measure

Cover crops are sown as soon as possible after clearing the previous crop and are grown between two main crops as green manure or for forage use. Alternatively, an undersown crop (see measure sheet „Wide row with flowering undersown crop“) can be sown alongside a main crop, fulfilling the utilization possibilities as well as the ecological and agronomic functions of a cover crop after harvest. The selection of appropriate components depends on various factors, as outlined in the „Flowering cover crop“ measure sheet.

For overwintering cover crops, the focus is on erosion control and preventing nutrient leaching into groundwater during the winter months. Depending on the winter hardiness of the cover crop species and the winter weather conditions, cover crops may continue to grow into spring. Depending on the weather and the type of subsequent crop (e.g., early summer tillage), cover crop species should be chosen that can survive freezing temperatures, or appropriate biomass management options should be available. This is especially important in areas with erosion risks where spring tillage is not permitted.

Winter hardiness is influenced by many factors beyond the choice of cover crop; for instance, stands that are well supplied with nitrogen will freeze faster than hardened stands when temperatures drop sharply without snow cover. In addition, winter hardiness within the species is partially strongly dependent on the variety.

Effects on biodiversity

Cover crops provide habitat and food for insects, among other things, by functioning as a (relatively late) source of pollen or grains and, where appropriate, by reducing nutrient pollution. Overwintering cover crops provide overwintering habitat and shelter for insects and small wildlife, as well as seed stands for birds. Rooting through the cover crop and the subsequent decomposition of biomass increases soil activity.

Further positive effects

Cover crops reduce nutrient leaching and water erosion through root penetration and soil cover. They improve water-holding capacity and soil structure and contribute to the accumulation of humus. Legumes can contribute additional nitrogen to the soil.

Further recommendations

Precipitation should be considered as a key success factor in planning.

Sources: https://ltz.landwirtschaft-bw.de/,Lde/Startseite/Kulturpflanzen/Zwischenfruechte+und+Untersaaten