Wide row with self-greening

Description of the measure

For the „Wide row with self-greening“ measure, a cereal field is cultivated at a lower density and self-greening is made possible.

Implementation

- Locations with high precipitation levels and good precipitation distribution
- Sowing at a lower density, with double seed row spacing or with drill gaps
- Sowing density of 50-70 % per m² compared to conventional density; at field level, partial area or strip form (at least 15 m wide)
- Reduced and adapted (mineral) fertilization (fertilization 50-70 % of the otherwise farm/area-specific level); maximum N surplus: 10 kg N/ha.; or green manure/light organic fertilization possible depending on location
- Avoidance of synthetic chemical pesticides (especially herbicides and insecticides)
- No or reduced mechanical weed control (e.g. harrowing)
- Late stubble cultivation to promote arable wild herbs with late seed maturity and protect amphibians and young hares
- Standing time like the cereal crop

Variants

- Double row spacing: every second drill coulter closed (row spacing of approx. 18 cm)
- Half seed rate: Reduction of the seed rate by 30-50 % when sowing
- Drill gaps: Creation of gaps during sowing by closing seed coulters with a width of 30-50 cm; spacing between the drill gaps: 1-2 m

Various harvesting options

- Normal harvesting and transplanting (transplanting from August 31 at the earliest, ideally leave over winter)
- Normal harvest, then leave stubble fallow (see measure sheet „Late stubble cultivation“)
- Leave extensive cereals standing over winter

Effects on biodiversity

Double row spacing and the associated reduced fertilization generally protects biodiversity. The increase in light incidence promotes arable weed communities, which are a food source for open field species such as insects and field birds and are used by some insects to lay their eggs. In winter, insects can hibernate here, small wildlife can find shelter and birds can feed on the seed heads. Open patches of ground can provide breeding habitats for ground-nesting insects. Ground-nesting farmland birds such as the skylark use open cereal crops as nesting sites.

Further recommendations

The amount of precipitation is crucial for the success of extensive arable and stubble crops. They should preferably be planted on lean land without dominant weeds or on low-yielding sites such as knolls, field margins or sandy sites.

If there is a lack of seed potential in the soil, the variety of flowers in the light strips or cereal gaps can be supplemented by sowing native wild herbs and flowering crop species with low seed rates.

Reducing the seeding rate can lead to yield losses. However, in the case of early-sown winter cereals with good pre-crop values, increased tillering can largely compensate for the losses.

For further reading: *https://franz-projekt.de/uploads/Downloads/Massnahmen/Ma%C3%9Fnahmenblatt_Extensivgetreide%20(1).pdf*

Sources: *https://www.rheinische-kulturlandschaft.de/massnahmen/a4a-extensive-aecker-lichtaecker/*