



MACHO – New high yielding variety for more diversity

Spring Field Bean

BREEDER / DISTRIBUTOR

NPZ / Saaten-Union

VARIETY DESCRIPTION

MACHO was registered by the German Federal Plant Variety Office in 2018 due to its very high grain yield potential and high protein yield. One factor for the very high yield potential is the high seed weight as an important yield component. This requires appropriate attention to the sowing technique. Sowing densities for MACHO should be therefore in the lower range of local recommendations. Internal trials have shown that the economic potential of this variety is maximized under normal sowing conditions with a reduced **sowing density of 30-35 grains/m²**. In addition, MACHO has a high lodging resistance and medium maturity.

In the processing industry, a large grain size (= large surface area) is seen positively. At the moment, new markets and new sales opportunities for farmers are developing. MACHO fits optimally to these requirements.

Agronomic Characters	
Yield potential:	very high
Protein content:	medium
Protein yield:	high
Grain weight:	high – very high
Begin of flowering:	medium
Maturity:	medium
Lodging resistance:	high
Plant length:	medium – high
Susceptibility	
Ascochyta:	low – medium
Botrytis:	low – medium
Rust:	low – medium

Crop husbandry

Sowing time: As early as possible and as soon as the soil can carry traffic. Starting from the end of February, Seedlings are frost tolerant down to -5°C.

Sowing depth and density: on medium soil types: 8-10 cm; on heavy soils: 6-8 cm sowing depth. In normal planting conditions a reduced sowing density of 30 – 35 viable seeds / m² is recommended.

Row spacing: 12,5 to 30 cm; wider row spacing in connection with precision seeding possible.

Fertilization: no nitrogen fertilization necessary; generally adapted to local conditions; guide values: 40-60 kg/ha P₂O₅; 100-130 kg/ha K₂O; 20-50 kg/ha MgO; micronutrients as required

Plant Protection: *Pesticide strategies have to be fine-tuned with local advisory institutions.*

Information level 2020

All variety descriptions have been prepared in accordance to the best of our knowledge, considering trial results and observations. A guarantee or a liability in individual cases is not possible, because the growth conditions are subject to substantial fluctuations.