PRODUCT DATA SHEET

Common mallow

Botanical name	Malva sylvestris
Seeding rate	5-10 kg/ha for seed production, 10-15 kg/ha for
	use as catch crop, 12-15 kg/ha in mixtures for bee
	pastures, wildlife grazing or biogas substrate
Distance between rows	30-50 cm for seed production, 12-30 cm for use as
	a catch crop
Sowing period	April to May for seed production, July to August
	for use as a catch crop
Sowing depth	1-2 cm
TGW	3.2-7 g



General information and usage

A true all-rounder and a generalist with a wide spectrum of uses

Common mallow offers a variety of potential uses: attractive for wildlife grazing and bees alike, it can also serve as green manure or as a medicinal or ornamental plant. Mallow can also be used as a pioneer plant for soil recovery through revegetation. It has potential as a fodder crop as well, though prior shredding is necessary. The plants have a high protein and crude fibre content, with a moderately high net energy for lactation (NEL) value. Palatability and digestibility are rated as average. Mallows can also be effectively integrated into biodiverse wild plant mixtures as a substrate for biogas plants, with yields of around 25,000 kg/ha wet weight (around 3,000 kg/ha DM). While pure sowing is a good option, common mallow is usually planted in mixtures.

Botanical information

- Family: Malvaceae (Mallow family)
- Common mallow (Malva sylvestris) has various subspecies; so far, the following have been described:
 - Common mallow (Malva sylvestris L. ssp. sylvestris)
- Mauritanian mallow (Malva sylvestris ssp. mauritiana)
 Origin: Asia, Southern Europe and North Africa, naturally
- widespread throughout Europe since the Middle Ages
- Most important cultivation areas: Europe, Australia and the USA

Morphology

- Seldom annual, mostly biennial and sometimes even perennial herbaceous, upright and relatively stable plants with a height of 30-120 cm
- Stem: rounded to angular, solid, lignification from below immediately after flowering
- ▶ Roots: generally forms a deep taproot
- Leaf shape: large, cordate to palmate, mostly five-lobed, upper leaves are more elongated and often hairy
- Inflorescence: individual flowers growing from the leaf axils, violet to crimson
- Reproduction: Cross-pollination by insects
- Flowering period: May to September
- Fruit: disc-shaped, glabrous schizocarp



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Varieties and seeds

- The species are not included in the German Plant Variety Catalogue and there is no formal catalogue of varieties; most work is done with verified seed
- ▶ Germinability of many batches 80-90%

Feed value of common mallow

Digestibility of organic material	Crude protein	Crude fat	Crude fibre	Crude ash	N-free extract	NEL
%	g/kg DM				%	MJ/kg DM
71	188	30	233	154	395	5.71

Climate requirements

- ▶ In terms of climate requirements, mallows are generally undemanding and adaptable
- Warm, sunny sites with mild winters are favourable
- · Can be cultivated in dry to moderately wet sites

Soil requirements

- Mallows can do well on many soils
- They thrive on sandy loams in sunny areas and soils that are permeable and nutrient-rich, with a pH between w5.5 and 7.5
- Soils with high clay and silt fractions are also tolerated
- Generally winter hardy

Crop rotation

- No particular requirements in terms of prior crops
- ▶ 3-4 year cultivation interval
- Seed shedding possible



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Soil preparation

- The aim is to have a well-distributed, even, finely crumbled and weed-free seedbed
- On silty soils, avoid preparing a seedbed that is too fine

Objective	New cultivation
ures	Basic soil preparation (primary preparation): in heavy soils, clear by ploughing; in areas with light soil, a cultivator can also be used.
Meas	Secondary processing: use a tiller or rotary harrow for an evenly crumbled, well-distributed seedbed.

Sowing

- Emergence is generally 10-14 days after sowing
- The minimum germination temperature is 14°C, minimum growing temperature 18°C

Crop protection

- Adequate weed control, mechanical processes may be used
- Mallows' competitive vigour against weeds is middling in their early development but very high in established stands
- Indirect weed prevention measures include choosing the right crop rotation and using weed-free seed with high germinability
- So far no major diseases or pests are known

Fertilisation

 Basic fertilisation based on soil testing Annual nutrient losses in kg/ha:

	Total N	P ₂ O ₅	K ₂ O	MgO
Total	60-80	40-80	90-110	10-15

Harvest and treatment

- Optimal harvest time for seeds is very hard to determine due to uneven ripening
- Dry matter yields are around 3,000 kg/ha
- ► The optimal cutting time for fodder is before the flowering phase → in later cuts, the feed quality drops off sharply due to rapid lignification
- When sown in April or May, seeds reach maturity in midsummer
- ▶ It is recommended to dry to 12% residual moisture



Any questions? Please feel free to contact us! +49 2151 - 44 17 0 info@freudenberger.net