# **PRODUCT DATA SHEET**

# **Perennial ryegrass**

Botanical name	Lolium perenne				
Seeding rate	750-1500 seeds/m <sup>2</sup> at a thousand grain weight				
	of 2-4 g ≈ 25-30 kg/ha				
Distance between rows	Row planting similar to cereals possible (if necessary				
	two passes with half the seed amount each), narrow				
	row planting using a slice seeder (especially for				
	resowing) a good option				
Sowing period	Early March to late September				
Sowing depth	Shallow (0-1 cm) since it needs light to germinate				



### Botany

- ▶ Family: Poaceae (grasses)
- Origin: Europe and North Africa
- Genus: Lolium
- Perennial, persistent low grass for intensively used grassland sites on which it forms thick swards
- Fodder grass ideally used in reseeding due to its quick establishment and early development
- Reliable germination rates can be obtained with Coated Seed technology and sufficiently high average temperatures
- Well-rounded variety portfolio available, about 300 approved varieties in Germany, organised into maturity groups
  - Additional differentiation also possible within the portfolio of varieties, especially by ...

- Perennial ryegrass is a high-performing low grass that regenerates and regrows quickly and can withstand intensive use, trampling and grazing, although it does require large amounts of water
  - Highest yields in the more favourable lands of the northwestern German plain and in the alluvial soils along the lowland plateau in combined cultivation regimes with 3-6 cuts followed by subsequent grazing, but also in strictly short-grass pasture systems
- Received a grade of 8, the highest possible feed value number, and is highly digestible, especially for ruminants; exhibits higher energy and protein content than other pasture grasses



#### ... ploidy

<b>Diploid varieties</b>	Tetraploid varieties
<ul> <li>Higher sward densities</li> <li>More distinct fine leaves</li> </ul>	<ul> <li>More vigorous early growth</li> <li>Lower shoot and sward density</li> <li>Powerful individual shoots with higher indi- vidual leaf mass and area</li> <li>Better silage character- istics</li> <li>Higher water require- ments</li> </ul>

... growth habit

... resistance to diseases

# **PRODUCT DATA SHEET**

# Morphology

Leaf base	Folded
Lamina	Grooved top surface Smooth and shiny bottom surface
Leaf node	Delicate, white ligule Large auricle
Inflorescence	Loose, aristate spike
Other fea- tures	Reddish shoot base Wind pollinated

### **Climate requirements**

- ▶ Requires sufficient annual precipitation of > 600 mm
- Sensitive to black frost and late frost

#### **Soil requirements**

- Prefers fresh, loamy and clayey soils, lowlands and coastal areas are suitable
- Special portfolio of varieties available that are suitable for marshy soils (acidic soil pH, water inflows)

#### **Soil preparation**

• Soil preparation depends on the cultivation aim:



#### Reseeding

#### Towing and/or harrowing

Aeration, loosening, debris removal, levelling of the old grass sward by towing and/or harrowing. With the aid of the appropriate combination devices, it is possible to integrate all of the advantages of harrowing and towing while simultaneously carrying out a reseeding.

#### Rolling

Soil contact restoration through rolling. In recent years, rolling has become less frequent due to the danger of compaction in wet conditions.



Objective



**New cultivation** 

Soil preparation (primary preparation)

Secondary processing using a mill or rotary

harrow for a fine, well-distributed seedbed.

with plough for neat cultivation.

# **PRODUCT DATA SHEET**

# Sowing

- Cover crops can offer advantages
- If conditions are difficult, it can be a good idea to use a cover crop, e.g. Italian ryegrass, to protect the young plants

# **Crop protection**

# **Fighting weeds**

- Prior to preparing the soil for new cultivation, consider using herbicide if there are major pre-existing weed issues
- Topping as an effective measure against growing weeds at heights of 10-15 cm
- Prevent weeds from expanding and dispersing their seeds via mowing
- Due to their toxic effects, unwanted weeds like the marsh horsetail, stinking willie, meadow buttercup and sorrel and thistle species should be removed using mechanical means or chemicals that target individual plants.

# **Fertilisation**

- Soil fertilisation based on a soil assessment
- N requirement: 190 kg N/ha for 3-cut cultivation and 310 kg N/ha when used for 5-cut systems (note current fertiliser regulations!)
  - Minimum reductions of 10-50 kg N/ha for soils with > 4% humus content
  - Reduction of 20 kg N/ha when legumes comprise 5-10% of yield
- Nutrient loss for 3-5 cuts per year

	Total N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO
Total	190-310	89-117	268-364	104-138	33-46

### Harvest and treatment

- · Cutting use possible between late April and late October
  - First cut at the end of development stage 4 (BBCH stage 4 = boot stage) just before inflorescence emerges
- Fodder yields: approx. 8,000 kg DM/ha with 3 cuts and 11,000-12,000 kg DM/ha with 5 cuts
- Optimal cutting height: 7 cm





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