

JORVIK

Agrostis capillaris

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SEEDS & SCIENCE



Browntop Bent

Fine, dense and winter hardy.

Browntop bent (*Agrostis capillaris*) is used extensively on golf greens in mixtures with red fescue or as straight. It is seen as the “traditional” greens mixture for Northern Europe conditions and needs lower input.

It tolerates close mowing very well.

The shoot density is high and it is very adaptable to changing growing conditions.

- Very dense
- Uniform green
- Top visual merit all season
- Very winter hardy in cold conditions
- Very low regrowth



Browntop spearhead

For high quality prestigious golf greens in Northern Europe, more and more people are looking at browntop bentgrass, *Agrostis capillaris*. The reason why is the arrival of new cultivars like JORVIK, which stand up to be compared with the best creeping bentgrasses.

TECH FACTS

Growth habit	Rhizomes and stolons
Establishment rate (days)	Medium 14-18
12 mm cut tolerance	Very good
Mowing frequency	> 3x / week
Traffic tolerance (Brinkman)	Good
Nitrogen required	Low to medium
Shade tolerance	Fair/Good
Cold tolerance	Good
Drought tolerance	Fair

Shaped for today's demands

When lower maintenance and pesticide use is of importance, the choice of browntop bent is becoming increasingly more interesting. For greens it makes a perfect partner for the new dense varieties of chewing's fescue.

Top rating in various regions

In recent trials in coastal and central regions of Norway, JORVIK has shown excellent performance and exhibits superior scores for visual merit throughout the year, highest tillering, plant cover, finest leaves and lowest daily regrowth. Nothing but qualities!



TRIAL RESULTS (GERMANY)

		USE FOR:			
VARIETY	ORNAMENTAL TURF	ORDINARY LAWN	SPORT/WEAR	LANDSCAPING	
 JORVIK	8	8	8	7	
 POLANA	8	9	8	7	
 DENSO	7	7	8	8	
 HIGHLAND	---	6	---	6	
ABERROYAL	7	7	7	7	
BARDOT	8	8	7	7	
BARKING	7	8	7	7	
GOLFIN	---	---	---	6	
HERIOT	7	7	8	8	

(Scale 1-9, 9 is highest) Source: German recommended list RSM 2009





TRIAL RESULTS (SCANDINAVIA)

VARIETY	VISUAL MERIT (1-9) OVERALL MEAN	TILLER DENSITY (1-9)	WINTER DAMAGE (%)	DORMANCY COLOUR (1-9)	LEAF FINENESS (1-9)
 JORVIK	3.3	4.2	67	4.5	5.0
 <i>GREENSPEED</i>	3.3	3.8	76	4.7	4.6
LEIRIN	3.6	3.8	47	3.0	3.6
LøEk 0015	3.5	3.9	51	3.5	4.6
ABERROYAL	3.3	3.9	76	4.8	4.6









Varieties of colonial bentgrass (*Agrostis capillaris*) - mean of four sites. Sown in 2007, first green year results of 2008. Visual merit, 1-9, 9 = highest. (Source: Bioforsk Rapport Vol. 3 Nr. 170 2008)

TRIAL RESULTS (THE NETHERLANDS)

VARIETY	PERSISTENCE	TURF DENSITY	RESISTANCE AGAINST	COLOUR		FINENESS OF LEAF	LEAF COLOUR
			MICRODOCHIUM PATCH IN WINTER	WINTER	DRY CONDITIONS		
 JORVIK	8.4	8.3	8.5	7.2	6.5	8.3	MIDDLE
 <i>GRASSLANDS EGMONT</i>	8.5	8.2	7.8	7.8	5.9	8.0	MIDDLE
BARDOT	8.4	8.5	8.3	6.6	6.6	8.4	MIDDLE
ALLURE	8.1	8.0	8.2	6.9	6.6	7.7	MIDDLE
TRACENTA	8.0	7.9	7.8	6.7	6.5	7.4	MIDDLE
ARLETTA	8.4	8.3	8.0	7.5	6.4	8.2	LIGHT

(Source: Grasgids, recommended list 2009)

TRIAL RESULTS (BINGLEY, UK)

VARIETY	SHOOT DENSITY	VISUAL MERIT	MEAN	DISEASE RESISTANCE RED THREAD	SUMMER GREENNESS
 JORVIK	6.9	6.9	6.9	4.9	6.8
 <i>GREENSPEED</i>	7.0	7.1	7.1	5.3	6.4
 <i>EGMONTTWO</i>	6.9	6.9	6.9	5.5	6.4
 <i>EGMONT</i>	6.8	6.8	6.8	5.9	6.4
 <i>DENSO</i>	6.5	6.9	6.7	6.4	6.7
 <i>TIGER NOVA</i>	6.2	6.5	6.4	6.1	6.9
 <i>LANCE</i>	6.4	6.7	6.6	5.8	6.2
 <i>MANOR</i>	7.3	7.4	7.4	4.8	6.2
BARKING	6.9	7.6	7.3	5.6	6.1
HERIOT	6.9	7.4	7.1	5.3	6.3
ABERROYAL	6.8	7.3	7.1	5.7	6.6
SEFTON	6.7	7.1	6.9	4.7	5.7
TROY	6.8	6.6	6.7	6.0	6.1
ARLETTA	6.0	6.5	6.2	4.9	5.5
VITEK	5.8	6.1	6.0	---	7.0
MANDOLIN	6.2	5.7	5.9	6.0	6.4
RADIANCE	5.5	6.1	5.8	6.0	6.4
AMBROSIA	5.7	5.9	5.8	6.2	5.8
TRACENTA	5.4	5.7	5.5	5.0	6.7

(Scale: 1-9, where 9 is the highest score for adaptation to the type of use) Turfgrass Seed, recommended list 2009 (Greens, Close Mown Trials (Mown at 4-7mm))

Maintenance of browntop bentgrass (*Agrostis capillaris*)

Seeding rates (sown as straight on golf green):

New plantings: 100 kg/ha

Overseeding: 50 kg/ha.

Seeding date: Spring or autumn

Fertilisation (pre-sowing and sowing)

Normal seed: pre-plant incorporated: 70 kg N/ha

pre-plant topdressed: 35 kg N/ha

iSeed®: if iSeed® is used no starter fertilization is necessary



Fertilisation (season)

Nitrogen (N): 80-150 kg/ha/yr

Phosphorus (P): 50-75 kg/ha/yr

Potassium (K): 250-400 kg/ha/yr

Micronutrients: depending on soil analysis or plant tissue tests during the year.

Mowing

First mowing at plant heights of 4 - 5 cm

Get to the desired mowing height within seven weeks

Normal 4 - 12 mm, good durability at 4 mm with 3 mm for special tournaments

Irrigation

Irrigate only when necessary

Keep intervals between irrigation cycles as long as possible

Topdressing and verticutting

Frequent verticutting according to seasonal growth, followed by topdressing

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