ANNUAL RYEGRASS

LOLIUM MULTIFLORUM- COOL SEASON ANNUAL/BIENNIAL GRASS

PRODUCTION GOALS

	Not Effective ▮▯▯▯▯	Very Effective ▮▮▮▮▮
Quick Growth		▮▮▮▮▯
Lasting Residue		▮▮▮▮▯
Soil Builder		▮▮▮▮▯
Nitrogen Fixation		*n/a*
Nitrogen Scavenging		▮▮▮▮▯
Erosion Reduction		▮▮▮▮▯
Compaction Reduction		▮▮▮▯▯
Biofumigation Potential		▮▯▯▯▯
Weed Suppression		▮▮▮▮▯
Forage Harvest Value		▮▮▮▮▯
Grain Harvest Value		▮▮▯▯▯

Annual ryegrass has two subspecies grown in BC: Westerwold and Italian ryegrass. It is a rapidly growing, highly tillered cool season bunchgrass with an upright growth habit and a medium depth fibrous root. Annual ryegrass is commonly grown as a forage crop or for rapid ground cover. Italian ryegrass is a possible biannual that requires exposure to cold for flowering.

TOLERANCES

Flood	▮▮▮▮▯
Heat	▮▮▮▯▯
Drought	▮▮▯▯▯
Shade	▮▮▮▮▯
Low Fertility	▮▮▯▯▯
Salinity	▮▮▮▯▯
Optimal pH	5.5 - 7.0

SOIL DRAINAGE CLASS

Very Well	■
Well	■
Moderately Well	■
Somewhat Poor	■
Poorly	▯
Very Poorly	▯

AREA & ADAPTABILITY

Annual ryegrass is suitable for all regions of British Columbia. Italian ryegrass can overwinter in zones with milder winter and/or adequate snowcover.

Winter Hardiness Zone - 4-9

Seeding Considerations

Rate Drilled	Rate Broadcast	Depth	Frost Seeding	Minimum Germination Temperature	Seeds #
10-35 lbs/ac (11-39 kg/ha)	12-42 lbs/ac (13-47 kg/ha)	0-0.5 in (0-1.25 cm)	No	4°C (40°F)	227,000 /lb (102,965 /kg)

Management Considerations

Westerwold annual ryegrass behaves as an annual and sets seed in the first season. It has more upright growth than Italian ryegrass and can volunteer if allowed to set seed. It is commonly used as a nurse crop for forage stands, interseeded within a cereal forage for a fall relay crop, and as a quick ground cover.

Inter-seeding Potential ▮▮▮▮▯

Volunteer Establishment ▮▮▮▮▮

Nitrogen Concentration 0.8-3.6%

Italian ryegrass is winterkilled in many regions of Canada and thus commonly confused as an annual. However, it is a biennial that will overwinter in southern BC and produce seed the following spring if allowed to mature. It has higher forage quality than Westerwold and can also volunteer if allowed to set seed. It is commonly used for forage for grazing or silage and interseeded with other annuals for relay or blend use. Italian ryegrass is a heavy user of nutrients and water, and an aggressive cutting schedule can produce large forage yields of high quality feed.

Dry Matter Yield

1000-9000 lbs/acre

1120-10,080 kg/ha

Both types of annual ryegrass have seed available as diploid and tetraploid (2 or 4 sets of chromosomes). Generally diploid ten to have a more vigorous establishment and smaller seed size allowing for reduced seeding rates, however tetraploids generally have higher forage quality.

Termination

Annual ryegrass can be terminated by tillage or chemical means. Mowing is not effective before seed heads are set as regrowth will occur, and multiple passes may be necessary.

References

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