



# Saskatchewan Forage Council

## Annual Ryegrass

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Italian ryegrass (*Lolium multiflorum*) is a biennial from Northern Italy that does not survive our Canadian winters and therefore does not normally produce seed. Italian ryegrass has lush leaves with many tillers, is suitable for pasture and works well for late fall/winter grazing. Because it remains vegetative long into the fall, it has very high quality and energy similar to annual forage crops such as barley and oats (Duane McCartney – Western Forage Beef Group School - June 2001). Italian ryegrass is best suited for the black/grey wooded soil climatic zone, or production under irrigation. It is a shallow rooted crop that **cannot** tolerate periods of extended drought especially if it has not had adequate time to establish. Fertility requirements are similar to cereal forages. Italian ryegrass does not survive Saskatchewan winters. □

Westerwolds (*Lolium multiflorum westerwoldicum*) was developed in Holland from a cultivar of Italian ryegrass that produces seed in the year of establishment. Like Italian ryegrass, Westerwolds ryegrass does not over-winter in Saskatchewan. Westerwolds is much more stemmy and upright than Italian ryegrass and has been used for hay, silage and grazing. It is a prolific seed producer and if allowed to produce seed, it can become a weed in subsequent crops. Like Italian ryegrass, Westerwolds requires high fertility similar to cereal forage crops. Because of its high moisture requirements, Westerwolds ryegrass is also best suited for the black/grey wooded soil climatic zone or irrigation.

Under drought conditions, annual ryegrass will grow slowly and produce very little useable forage. However, it has the ability to respond very quickly to moisture later in the growing season even if drought conditions have prevailed through June and July.

Most sources indicate that the seeding rate of annual ryegrass should be between 25 – 30 seeds per linear foot of row on a one-foot row spacing (13 lbs/acre) or 10 – 15 seeds per linear foot of row on a six-inch row spacing (12 lbs/acre). Seeding depth should be similar to those established for perennial forage grasses.

Annual ryegrass is very non-competitive for the first month after seeding, therefore weed control is critical. There are very few herbicides that can be used in-crop and still allow the forage to be grazed. MCP amine, ester or K and Na salts can be used but you must allow seven (7) days after application before using the forage as a feed source. Assert 300 is registered for use on annual ryegrass crops, but the forage cannot be used as a feed source in the year of application. For an up to date list of available herbicides refer to the Saskatchewan Crop Protection Guide.

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As mentioned, annual ryegrass requires fertility regimes similar to cereal crops. However, the Western Forage Beef Group recommends that a follow-up application of nitrogen be applied after each harvest to stimulate regrowth. The general recommendation is to apply 30 – 40 lbs/acre actual N on dryland or 40 – 50 lbs/acre actual N under irrigation, after harvesting for silage, hay or grazing. However, it is recommended that a soil test be submitted before seeding to determine proper fertility requirements of the crop. Each producer should keep in mind the need to conduct forage quality assessments on their forage crops before they are utilized as a feedstuff. □

Annual ryegrass utilization can begin when the plants reach a height of 8 to 10 inches. The annual ryegrasses can generally tolerate utilization of 70% during each grazing event, with 3 – 5 weeks of rest between grazing events. However, in order to prevent seed production, the Westerwolds annual ryegrasses should not be allowed to produce heads.

In general, annual ryegrass is a highly productive forage grass in most years when sown in the black/grey wooded climatic zones, or under irrigation. An important consideration is the cost of seeding annual forages each year compared to establishment of a perennial forage crop. However, not every producer is in a position to utilize perennial forages in their farming operation. Annual ryegrass fits well into an annual cropping system and has high forage quality that could be utilized by livestock producers under grazing situations. Because annual ryegrass is an annual and only lives for one season, it is attractive to grain producers who want to increase their options and the diversity of their farming operation. Annual ryegrass stays green well into the fall and throughout the winter under snow. Therefore it can be used to extend the grazing season beyond the normal grazing period or may be utilized as stockpiled forage.

Annual rye grass will fit very well into many forage production systems. However, consideration must be given to the increased weed, fertility, and moisture management requirements of this crop and the higher risk associated with each.

For more information contact the Saskatchewan Forage Council at (306) 966-8663.

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