

# Growing Annual Ryegrass for Forage

## Area of adaptation

Annual or Italian ryegrass (*Lolium multiflorum*) is a short-lived, cool-season forage grass used throughout the temperate climates of the world. Annual ryegrass is a major winter annual forage grass in the southeastern region of the United States. Adaptation in Oregon is limited to areas west of the Cascade Mountains, as annual ryegrass is less winter hardy than orchardgrass or tall fescue. Because of its tolerance of wet soil conditions, annual ryegrass is often planted in areas too wet for other crops.

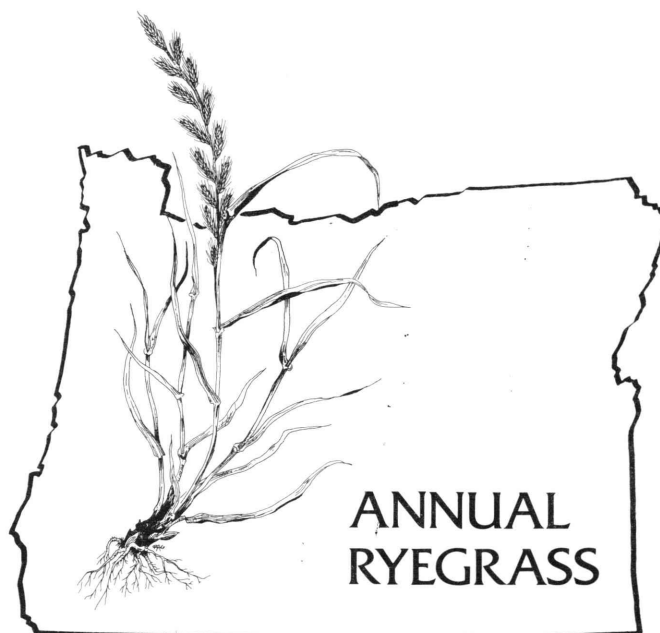
## Primary use

Annual ryegrass is commonly used as a temporary pasture grass because of its strong seedling vigor. The high production capacity of this grass also makes it a popular choice for use as a green manure crop or temporary cover of disturbed soil. Although annual ryegrass grows quickly and is highly productive, its annual and aggressive nature makes it less desirable in permanent pasture mixes. As a cool-season grass, it is summer-dormant unless supplied with large quantities of soil moisture.

Use	Precipitation <i>inches</i>	Seeding rate <i>lbs/A</i>	Companion species	Companion species seeding rate <i>lbs/A</i>
Temporary pasture or green manure	>40 or irrigated	25	.....	.....
		20	Red clover and white clover or oats	4 2 70
Temporary dairy pasture	Irrigated	10-12	Kale or other brassicas	5
Cover crop in erosion control	>40	3-5	Tall fescue	5
			Orchardgrass	5
			Creeping red fescue	5
	20-40	3-5	Tall fescue	5
			Subclover	6
			Tall wheatgrass	5

## Varieties

Oregon annual ryegrass is widely grown and marketed in the Willamette Valley. Gulf annual ryegrass is a



public variety released by Texas A&M University in 1958. Marshall is an annual ryegrass released in 1980 by Mississippi State University. Grazing trials in the Southeast have shown Marshall to be superior to Gulf in both average daily gain and economic return per acre. These varieties were selected for good disease resistance.

Several proprietary annual tetraploid ryegrasses are also available from private seed companies.

## Establishment

Annual ryegrass may be seeded in the fall from late August to early October. Late August seedings may require irrigation to get seedlings started before the fall rains. Spring-seed in March or April. Drill seed 1/4 to 1/2 inch deep in a well-prepared seedbed. Follow seeding with a drag or harrow to lightly cover seed. When broadcast methods are used, higher seeding rates may be desirable.

## Fertility and pH requirements

Annual ryegrass requires a high level of fertility for maximum production. If annual ryegrass is grown with-



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out a legume, N is especially important for rapid growth. Broadcast 40 to 50 lbs N per acre at establishment. Only 20 to 30 lbs N per acre is required if N is banded. If annual ryegrass is grown with a legume, smaller amounts of N will be needed; legumes fix atmospheric N, and some of this N will be made available to the grass.

Adequate levels of P and S should be provided also. Best growth will occur between pH 5.5 and 6.5. Specific recommendations based upon soil test data are available in OSU Fertilizer Guide 16.

#### **Management**

When annual ryegrass is being used for pasture, highest quality forage is obtained by rotational or strip grazing. Keep grass between 2 and 6 inches high to prevent accumulation of stemmy, less digestible forage.

When annual ryegrass is grown in combination with clovers, close grazing, adequate amounts of S, and low application rates of N will favor clover growth. Allowing grass to shade clover, plus high N rates, will reduce the amount of clover in the stand.

#### **Grazing annual ryegrass seed fields**

Experiments conducted by OSU researchers have shown that spring grazing of annual ryegrass seed fields by sheep can result in good grazing forage without reducing seed yield. No effect on seed yield or total plant dry weight at harvest was observed in the 2 years of study. It was concluded that grazing fall-seeded annual ryegrass until early or mid-April will not reduce seed yield. Grazing later in the season, however, will result in lower seed yield.

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