

# Farm Science Genetics

## Orchardgrass

### Uses

**Livestock:** Orchardgrass may be used for hay, pasture or silage. It is highly palatable to all classes of livestock. Orchardgrass is one of the best forage grasses for use in pastures and in combination with alfalfa or red clover for hay.

**Erosion control:** Because of its dense network of roots, orchardgrass provides good erosion control on those soils to which it is particularly adapted.

**Wildlife:** Orchardgrass is used in grass-legume mixes for nesting, broad rearing, escape and winter cover for upland game birds and conservation plantings.



### Description

*Dactylis glomerata* L., Orchardgrass, is a persistent, cool season bunchgrass. Under dry land conditions, it usually develops distinct clumps and flower culms 15 to 18 inches tall. Leaves are usually less than 12 inches in height. When grown under irrigation or in more moist situations, it attains a height of 24-28 inches. No vegetative spread has been observed. Orchardgrass is one of the earliest species to grow in the spring, making tremendous growth during cool conditions. Due to deep roots, it also is capable of strong summer growth when conditions are favorable. Orchardgrass has 416,000 seeds per pound.

### Adaptation and Distribution

Orchardgrass is found from Canada to the Gulf Coast states and from the Atlantic coast to the Pacific coast. However, orchardgrass is not as winter hardy as smooth brome or timothy. Orchardgrass performs well on different textured soils ranging from clay to gravelly loams and on shallow to deep soils. does not grow well in saline soils and areas with high water tables. It has the ability to establish and persist in areas that receive as little as 11 inches of annual precipitation. Orchardgrass performs best in a pH range of 5.8-7.0.

### Establishment

A clean, firm, weed-free seedbed is recommended. Range and erosion control seedings should be made in the late fall or very early spring. Do not seed after the spring moisture period is well advanced or a failure may occur because of drought and hot summer conditions before the grass is well established. A deep furrow or range drill with press wheels may be used. Orchardgrass is easily established with grain drills or by broadcasting seeding. The seeding rate is 8 to 12 pounds/acre. For range and critical area treatment a seeding rate of 3 to 4 pounds/acre is recommended. If broadcast, double the seeding rate. Adjustments in seeding rate should be made when seeding in mixtures. Seeding depth should not be more than ½ inch.

### Management

Under irrigation and higher rainfall areas, orchardgrass should be cut at boot stage for the first cutting and then at 4 to 6 week intervals depending on regrowth. Rotational grazing is best for production, persistence and quality. Fields should be grazed heavily and frequently during the spring, but do not overgraze. Leave a 3- to 4-inch stubble so plants can recover quickly. Heavy grazing during the late fall should be avoided to prevent depletion of root reserves. Under dry land conditions, orchardgrass should not be grazed until late summer or fall of the second growing season. The plants may be severely damaged by overgrazing especially in the seedling year. Use no more than 60% of the annual growth during the winter season or 50% during the growing season. This plant responds well to rotational grazing systems. Orchardgrass responds to good fertility management. One strategy, to even out the forage production, is to fertilize the stand after the first and second cutting or grazing to boost late spring and summer production. Apply fertilizer based upon soil tests.