Table 2. Effect of Various Rates of Nitrogen Fertilizer on Turfgrass Quality

Variety	Yearly rate of nitrogen (N) per 1,000 sq. ft.		
	10 lbs.	5 lbs.	None
	Visual estimate of turf quality[1]		
Cougar	1.7	2.2	5
Merion	2.3	3.0	9
Newport	2.7	3.0	5

[1] A rating of 1 is best.

Seed Production

Seed production has been superior to Merion in two experiments in Oregon (Table 3). The seed matures about one week later than Merion and shattering of seed in the field has been significantly less. This greatly reduces harvest losses and also results in plump, well-filled seed.

Table 3. Seed Yield of Four Kentucky Bluegrass Varieties

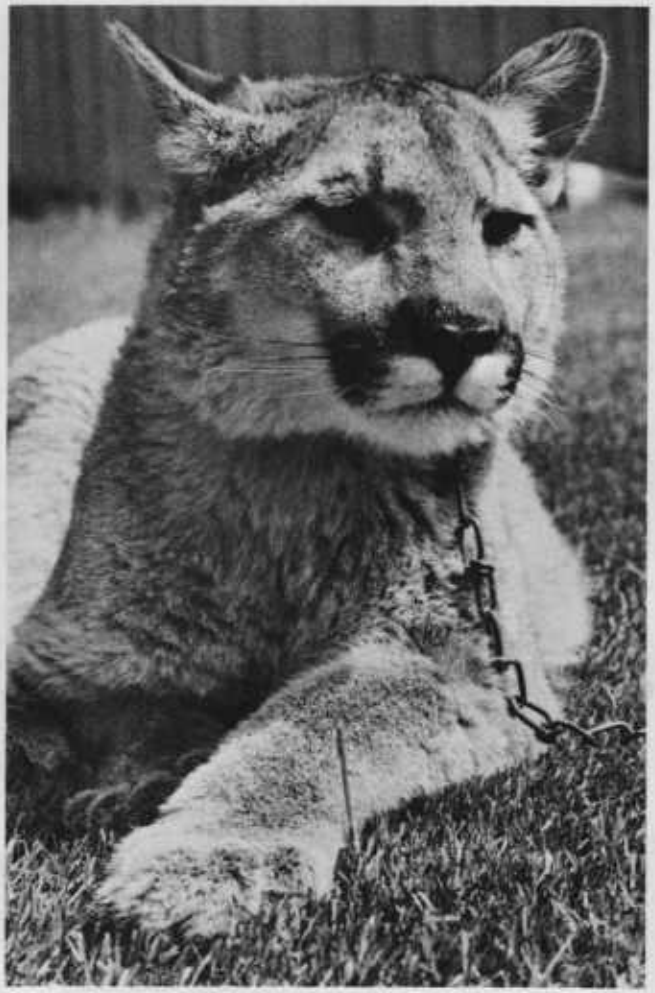
Variety	Medford (irrigated)	Union (dryland)	Corvallis (dryland)
	Lbs./A	*Lbs./A*	*Lbs./A*
Cougar	837	260	370
Merion	491	328	282
Newport	1,077	555	685
Delta	825	364	425

History

Cougar bluegrass was released by Washington, Oregon, and Idaho in 1965. It was selected from a 1934 plant introduction, FC 22, 190, from Denmark. Final selection was made by J. L. Schwendiman, Soil Conservation Service Plant Material Specialist, and A. G. Law, Agronomist at Washington State University.

This publication was prepared by A. G. Law, Agronomist, Washington State University; J. L. Schwendiman, Plant Material Specialist, Soil Conservation Service, U. S. Department of Agriculture; R. L. Goss, Associate Agronomist, Washington State University; and K. J. Morrison, Extension Agronomy Specialist, Washington State University, and supplemented by data from the Oregon Agricultural Experiment Station.

Cougar Kentucky Bluegrass



Circular of Information 626

April 1967

Agricultural Experiment Station
Oregon State University
Corvallis

Cougar Kentucky Bluegrass

Characteristics

Cougar, a new dwarf Kentucky bluegrass for the Pacific Northwest, has a number of outstanding characteristics—

Dwarf growth habit. Forms dense, wear-resistant turf that discourages invasion by weeds and can be clipped as low as one-half inch from the ground without reducing its vigor.

Strong rhizome formation. Produces underground rhizomes that fill in open turf and heal damaged areas rapidly.

Long growth period. Maintains dark green color late into the fall and starts growing earlier in the spring than other popular bluegrass varieties.

Good nitrogen response. Responds well to heavy nitrogen fertilization, producing vigorous growth and a deep green color.

Good disease resistance. Resists mildew and leaf rust and, to some extent, stripe smut.

Cougar is excellent for home lawns and is especially good for recreation areas that receive heavy use, including football fields, city parks, and golf-course tees and fairways.

Description

Cougar Kentucky bluegrass is dark green and has a low-growing dwarf habit. The leaves are wider than Merion bluegrass, although this difference tends to disappear in dense turf. Cougar is strongly rhizomatous. The rhizomes creep and produce new shoots that fill in open areas.

Performance

Cougar maintains a dense turf, in vigorous condition, even when clipped as low as ½-inch in height as shown by both the visual rating and the number of shoots per 4-inch plug in tests at Pullman, Washington (Table 1). In contrast, tall-growing varieties, such as Delta, show greatly reduced numbers of shoots when clipped this close to the soil surface.

Table 1. Density and Weed Invasion of Turfgrass After Three Years of Cutting at Various Heights

Variety	Cutting height of grass					
	1 in.	½ in.	1 in.	½ in.	1 in.	½ in.
	Visual density[1]		*Shoots per 4 in. plug*		*Percent weeds*	
Cougar	2	1	160	168	0	0
Merion	3	3	150	170	5	5
Newport	4	4	133	150	5	5
Delta	6	9	128	112	45	45

[1] A rating of 1 is most dense; 9, least dense.

The dense turf formed by Cougar discourages weed invasion. Cougar experimental plots had fewer weeds than those of the other varieties.

Cougar keeps its green color late into the fall and starts growing earlier in the spring than Newport, Delta, or Merion Kentucky bluegrass.

Cougar is resistant to mildew and leaf rust, two diseases which severely damage Merion Kentucky bluegrass. In tests at Pullman, 100 percent of the Merion plants were infected by mildew, while less than 5 percent of the Cougar plants were infected.

Cougar was less severely injured than Merion by leaf rust at Corvallis. In addition, Cougar is affected less by stripe smut than any of the other bluegrasses tested. Stripe smut is a leaf smut that gives an undesirable color to the turf as well as discoloring shoes and clothes.

Cougar has excellent seedling vigor. Its rapid germination and emergence give it a much greater competitive advantage with weeds in newly established seedings.

Management

New seedings can be made any time during the growing season, although spring and late summer are the preferred seeding times. Cougar bluegrass should be seeded at 2 pounds per 1,000 square feet.

This grass responds to high rates of nitrogen fertilization. A yearly rate of 8 to 10 pounds of available nitrogen per 1,000 square feet gave the best response in tests at Pullman (Table 2). The nitrogen was applied at monthly intervals during the growing season. Phosphorus and potassium should be supplied in amounts indicated by soil test results.

Cougar bluegrass should be mowed at ½ to 1 inch above the ground. Clippings should be removed from spring and fall mowings.

Cougar should be watered as necessary to maintain a good turf during the dry summer months.