# Cayuse Oats

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Cayuse is a high-yielding, moderately early spring oat recommended in Washington and northern Idaho. It is a short, pale green variety with open and spreading heads. The straw is strong and resistant to lodging. The kernels are light yellow.

#### Performance

Cayuse has yielded 10 to 20 per cent more than Park in test plantings.

The main weakness of Cayuse is its test weight, which is relatively lower than that of Park. The test weight of Cayuse has averaged about 35 pounds per bushel in all Washington locations—compared with 37 for Park.

#### **Disease Resistance**

Cayuse has some tolerance to the most serious oat disease in Washington—yellow dwarf or "red leaf of oats." The yellow dwarf tolerance of Cayuse can be seen mainly in its high-yielding ability. Discoloration results after severe attack by aphids carrying the virus.

No other disease of consequence has attacked Cayuse in any Washington locations since testing began in 1959.

Although Cayuse is susceptible to node blackening and stem break, these diseases do not affect oat yields in Washington.

#### Development

Cayuse was selected from a cross of Craig x Alamo, made by N. F. Jensen, Cornell University, Ithaca, New York. Dr. George Bruehl made original tests in Washington.

Washington State University, Pullman, and the University of Idaho, Moscow, jointly named and released Cayuse in December 1966, with the approval of Cornell University.

Breeders' seed stocks are maintained at Washington State University and are available through the Washington State Crop Improvement Association.

#### COMPARATIVE YIELDS CAYUSE, PARK, OVERLAND\*

Variety	Pullman W	'alla Walla	Pomeroy	Puyallup
		bushels per acre		
Cayuse	116	88	94	113
Park	98	69	76	85
Overland	97	69	54	86

\* Average yields, 1965-67.

### NASHINGTON STATE FARM and HOME NEWS

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ADVANCE FOR RELEASE: WEDNESDAY, DECEMBER 14 Cayuse, 100-Bushel Oat Variety Released in Washington, Idaho

WASHINGTON STATE UNIVERSITY, Pullman, December -- Increased feed supplies for the state's rapidly expanding horse population will soon be provided by a new high-yielding variety of oats, a Washington State University official said today.

Approval of Cayuse oats for production in Washington and Idaho was announced today by Dr. Mark T. Buchanan, research director for WSU's College of Agriculture.

The new variety outyields all other commercial oat varieties in Washington. Peracre yields of Cayuse have averaged just over 100 bushels in three years of testing in eastern Washington, and around 98 bushels in 6 years of testing in western Washington.

Most marked advantage of Cayuse, Dr. Buchanan said, is its ability to produce high yields in western Washington in spite of yellow dwarf virus, major disease problem of the feed grain. Its one limitation is light test weight.

Cayuse shows the typical red-leaf symptoms of yellow dwarf infection but still outyields present commercial varieties and some 4,000 experimental varieties.

Six-year average yield of Cayuse at Puyallup and at Mount Vernon was 116 bushels per acre, and 76 bushels at Vancouver. Average annual yields in western Washington ranged from 44 to 182 bushels per acre.

Cayuse's high yields in the presence of yellow dwarf showed up in screen tests conducted at WSU's Southwest Washington Research Center, Vancouver.

Cayuse has short straw and is highly resistant to lodging in non-irrigated areas and moderately lodge resistant in irrigated areas.

Breeder's seed of the new oat variety will be distributed to the Washington Crop Improvement association for seed increase this coming spring.

## Cayuse, 100-Bushel Oat Variety Released in Washington, Idaho -- cont.

Seed for commercial production will be available to grain growers in limited supply in 1968, and in quantity in the spring of 1969.

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The new oat variety is a selection from a Craig-Alamo cross made by Dr. Neal F. Jensen, plant breeder at the Cornell Experiment Station, Ithaca, New York.

The variety was tested for yield and disease resistance in Washington by WSU researchers: Dr. G. W. Bruehl, plant pathologist, Dr. Cal Konzak, geneticist, and Lawrence Bacon, experimental aide, all of Pullman; Dr. P. C. Crandall, superintendent of the Vancouver research center; and Dr. H. M. Austenson, former agronomist at Puyallup.

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