Horizon 474
A new winter oat cultivar for both grain and forage

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Horizon 474 is a new winter oat variety that was co-developed by the University of Florida (UF) and the Georgia Agricultural Experiment Station (UGA) and was released in 2002. Horizon 474 has considerable potential for both grain and forage production in the Southeastern U.S. The new oat was selected from material donated by Northrup-King Seed Company to the USDA-ARS when the Coker Pedigreed Seed Company oat breeding program (owned by Northrup-King) was discontinued in 1989. Horizon 474 was derived from a bulk population, which originated from the cross (designated X474): Coker 84-15 X TX84Ab2131. Coker 84-15 was an unreleased advanced line that was tested in the 1985 Uniform Winter Oat Nursery. The TX84Ab2131 is a Texas breeding line where the crown rust resistance genes from TAM O-301, TAM O-312, Coker 227, and Coker 234 were combined with the stem rust resistance gene from Alpha (CI9221). This is the same source of stem rust resistance present in Steele, TAMO 386, and TAMO 397.

Grain Yield
Horizon 474 produces excellent test weight grain, is early maturing, and has good crown rust resistance. In comparison to Florida 501, a very popular older cultivar, Horizon 474 has higher grain yield, higher test weight, stronger straw, better crown rust resistance, and appears to be more winter hardy in comparison. Three-year average oat grain production for Horizon 474 was 120 bu/a in Georgia.

Horizon 474 is similar to Florida 501 in maturity and is 7-10 days earlier in maturity than Horizon 314, a popular variety released several years ago. Horizon 474 is a white seeded oat.

Forage Yield
Horizon 474 has been a reliable forage producer and has been recommended for grazing or hay production. This oat also fits well in dairy silage operations where high quality cool-season forages are utilized for greenchop or silage. Three-year season total average oat forage yield for Horizon 474 was 7645 lbs/a in Georgia and two-year average of 4941 lbs/a in north Florida under dryland conditions.

Horizon 474 was released exclusively to Plantation Seeds, Inc., Newton, GA.

Horizon 474 oat is considered to be an excellent choice for grain, hay, grazing or ensiling for use in the southeastern U.S.