Oat Variety Containing More Heart Healthy Fiber

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The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a variety of oat containing increased levels of beta-glucan.

OVERVIEW

Oats (Avena sativa) are an enormously popular cereal grain worldwide. As recently as 2009, Wisconsin led all other states in production, with more than 13 million bushels.

Oats are marketed as ‘heart healthy’ due in part to beta-glucan, a water-soluble fiber naturally found in oat bran. This polysaccharide has been extensively studied for three decades and has been shown to help reduce blood cholesterol levels. It is the only dietary fiber recognized by the European Food Safety Authority as capable of reducing disease risk.

Years of plant breeding have produced a number of oat lines with beneficial traits like improved yield and disease resistance. Still, a new line that boosts dietary value for health-conscious consumers could prove extremely valuable.

THE INVENTION

A UW–Madison researcher has bred oats with higher beta-glucan levels. The plants contain up to eight percent beta-glucan content by total fiber weight. The researchers spent 15 years using natural breeding techniques to develop the new oats, of the variety X8787-1. The plants are capable of normal breeding, seed and tissue production.

APPLICATIONS

• New oat variety with elevated beta-glucan levels

KEY BENEFITS

• Oats from new variety contain more desirable fiber.
• Reduces the overall amount of oats needed to meet 'heart healthy' industry standard
• The new oats also show high yields, good test weight, straw strength, good resistance to crown rust disease and good tolerance to barley yellow dwarf virus (BYDV).

ADDITIONAL INFORMATION

Related Technologies
WARF reference number P01285US describes an early-maturing oat variety called 'Moraine.'
WARF reference number P03266US describes a high-yielding oat variety called 'Drumlin.'
WARF reference number P04397US describes a high-yielding oat variety called 'Esker.'

Tech Fields
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CONTACT INFORMATION

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