NEW AUSTRALIAN PSYLLIUM

An all-natural gelling agent for use in gluten-free processed food markets as a next generation dietary fibre.

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Benefits

- Suits the hot, dry and saline conditions of the Australian climate.
- Displays higher yields than P.ovata, and the seed capsules do not shatter, allowing whole seed material to be used.
- Superior gelling and water holding properties.

Background

Psyllium is the outer husk of Plantago ovata seeds. It is a crop beset by problems, including pests and diseases and because the capsule shatters, releasing much of the seed onto the ground, it must be hand harvested. The quality is variable and the price is steadily rising, making it very difficult to secure a pure, reliable supply for the food industry. There is a steep, rising global demand for gluten-free products, estimated to be worth up to US$33 billion/yr by 2025, and for dietary supplements such as Metamucil.

Technology overview

A New Australian Psyllium (NAP) has commercial potential because when compared with P.ovata:

- It is salt tolerant
- The seed capsules do not shatter, allowing whole seed material to be used.
- It has superior gelling and water holding properties.
- It's yield per plant is excellent.

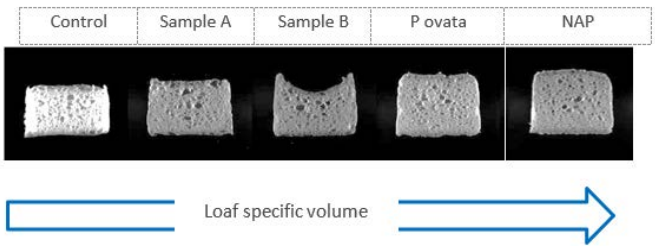
NAP provides a more versatile natural food thickening agent with enhanced gut health applications, combined with improved nutritional and sensory properties for use in processed food, particularly gluten-free food.

Applications

Based on early research, we believe NAP to be a superior all-natural gelling agent for use in the processed food, and in particular gluten-free, markets and that it will be a next generation dietary fibre.

Rapid Visco Analyser (RVA) amylography shows that NAP has superior properties when compared to conventional psyllium during pasting of a rice-based gluten-free system. An early increase in viscosity indicates a greater water-holding capacity, while an increased gelling capacity appears during paste setting.

Gluten-free baking trials



Small scale baking trials with a number of Plantago species have produced very exciting results, as shown here by the profile of mini-loaves containing 4% of the added whole seed ground Plantago flour.

Opportunity

We are seeking direct investment or collaboration partners to:

- Co-fund a breeding program to further improve upon the existing quality traits.
- Expand into production quantities.
- Conduct food production trials.
- License the technology.

IP Status

Patent pending.

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FURTHER ENQUIRIES

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