

RESEARCH ARTICLE

Effect of raffinose family oligosaccharides on seed germination of wild and mutant types of chickpea (*Cicer arietinum*)

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SUMMARY

The raffinose family oligosaccharides (RFOs) are a group of soluble galactosyl derivatives which include raffinose and stachyose thought to play a number of roles in plant development. They are providing a source of rapidly metabolizable carbohydrate during germination. In contrast to their potential for promoting germination, RFOs represent anti-nutritional units for monogastric animals when consumed as a component of feed. The exact role of RFOs during seed development and germination has not been experimentally determined, but it has been hypothesized that RFOs are required for successful germination. To serve as an energy sources, RFO's must be degraded into their component monosaccharides. However, low RFO had not significantly delayed or reduced in chickpea seed germination. It is concluded that RFOs are not an essential source of energy during chickpea seed germination in chickpea seeds.

Key Words : Chickpea, Carbohydrate, Raffinose family oligosaccharides, Seed germination

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