

TFF Tree Fresh Formulation

Invention summary:

Hexanal based, tree fresh formulation developed using bio-ingredients to extend the tree life / harvesting season of fruits and vegetables while reducing disease incidence.

Technology overview:

Hexanal is a naturally occurring compound in plants and is known to be a potent inhibitor of Phospholipase D (PLD) which is the key enzyme involved in the initiation of membrane deterioration and destabilization during the ripening process of fruits. Applying hexanal formulations as pre-harvest sprays have been known to increase fruit firmness, soluble solids, and antioxidant activity. The novel hexanal based formulation developed showed that pre-harvest sprays of the formulation significantly delayed fruit abscission, reduced post-harvest disease, and extended shelf life of mango under both ambient and cold storage conditions.

Potential application:

To extend the harvesting season of fruits and vegetables such as mango, papaya, rambutan, lime etc

Advantages of the TFF:

- Extend the harvesting season of fruits and vegetables by at least 5-6 weeks
- Reduce post-harvest losses by avoiding gluts
- Improve the cosmetic appearance of commodities

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