



Tropentag, September 18-20, 2019, Kassel

“Filling gaps and removing traps  
for sustainable resource management”

## Role of Extension in Enhancing Positive Perceptions of Innovations; A Case of Hexanal in Kenya

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### Abstract

About 40–50 percent of horticultural produce is lost along the value chain in sub-Saharan Africa. This is due to the short shelf-life of the fresh produce and lack of effective storage methods thereby leading to the high post-harvest losses. Promotion of technologies to reduce these losses is necessary in improving food security and economically empowering smallholder farmers. Hexanal is one of the technologies developed to prolong shelf-life of fresh produce such as bananas. However, farmers' perceptions towards such technologies are not yet fully understood especially when they are new to them. The study assessed the role of extension in enhancing positive perceptions and their determinants in using Hexanal to prolong fruits' freshness among banana farmers in Meru County. Data was generated from cross-sectional survey of 130 households who were categorised into two sub-samples, 'Aware' and 'Not Aware' of Hexanal. Three components of perceptions namely 'effectiveness' 'acceptability' and 'environmental safety' were extracted for both categories of farmers using Principal Component Analysis. Perception scores were later regressed against explanatory variables using Ordinary Least Squares. Despite both groups of farmers having positive perceptions towards some attributes of Hexanal, farmers already aware of Hexanal strongly agreed the technology was socially acceptable. However, farmers not aware of Hexanal had negative perceptions on 'acceptability' of the technology as they cited the need for more education on the use and benefits of Hexanal. Perceptions were influenced by different sets of variables such as age, access to credit, distance to input shop, income among others. To enhance positive perceptions, it is necessary stakeholders invest in factors such as supplying information about Hexanal through increased contact between extension agents and farmers which will increase uptake of the technology.

**Keywords:** Banana, enhanced freshness formulation, Hexanal, Kenya, perceptions, principal components,