



Get to know potassium nitrate in strawberry nutrient management

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Higher yields

KNO_3 promotes earlier bud break and quicker flower development, leading to sooner fruit setting and fruit size increase. Nitrate fed strawberries through convenient fertigation, has resulted in a higher biomass and increase in carboxylate and calcium content, which supports greater yield.

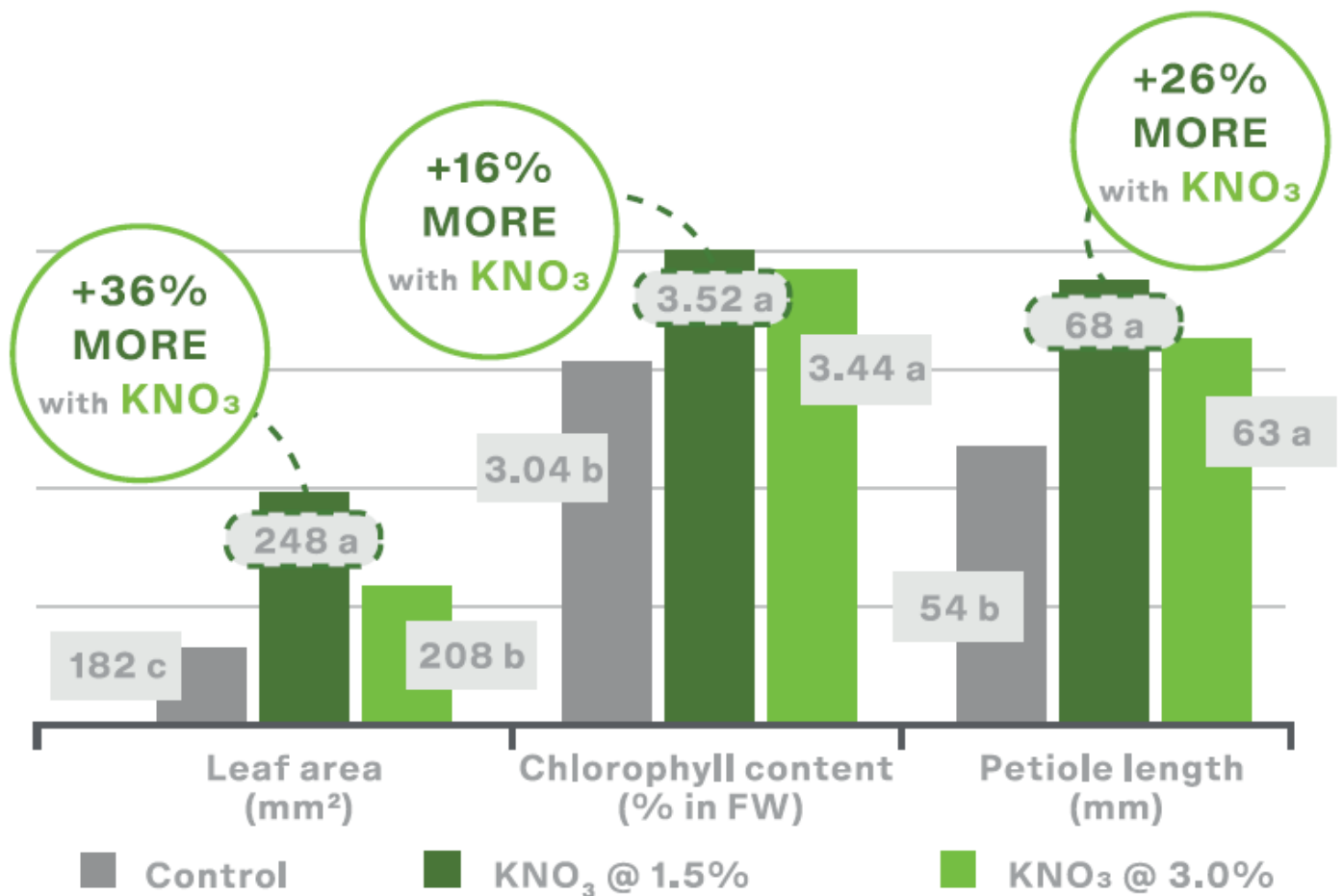
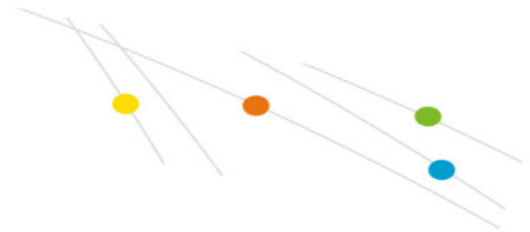
Stronger plants

The highest leaf area, increased root length, chlorophyll content and petiole length resulted from plants treated with foliar application of KNO_3 . Use of chloride free potassium nitrate can prevent injury to the chloride sensitive strawberry plant.

Foliar applied potassium nitrate is an effective bud break inductor for strawberry plants

The highest leaf area, chlorophyll content and petiole length resulted from plants treated with 1.5% KNO_3 without chilling. The results showed that potassium nitrate application alone at the proper time is inductive and has nutritional effects on growth and development of strawberry plants.

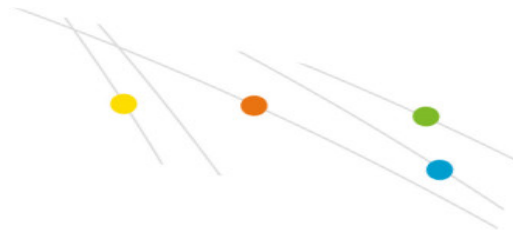
Effects of potassium nitrate treatments on growth induction of strawberry plants without chilling



Means with the same letter indicate that there are no statistically significant differences

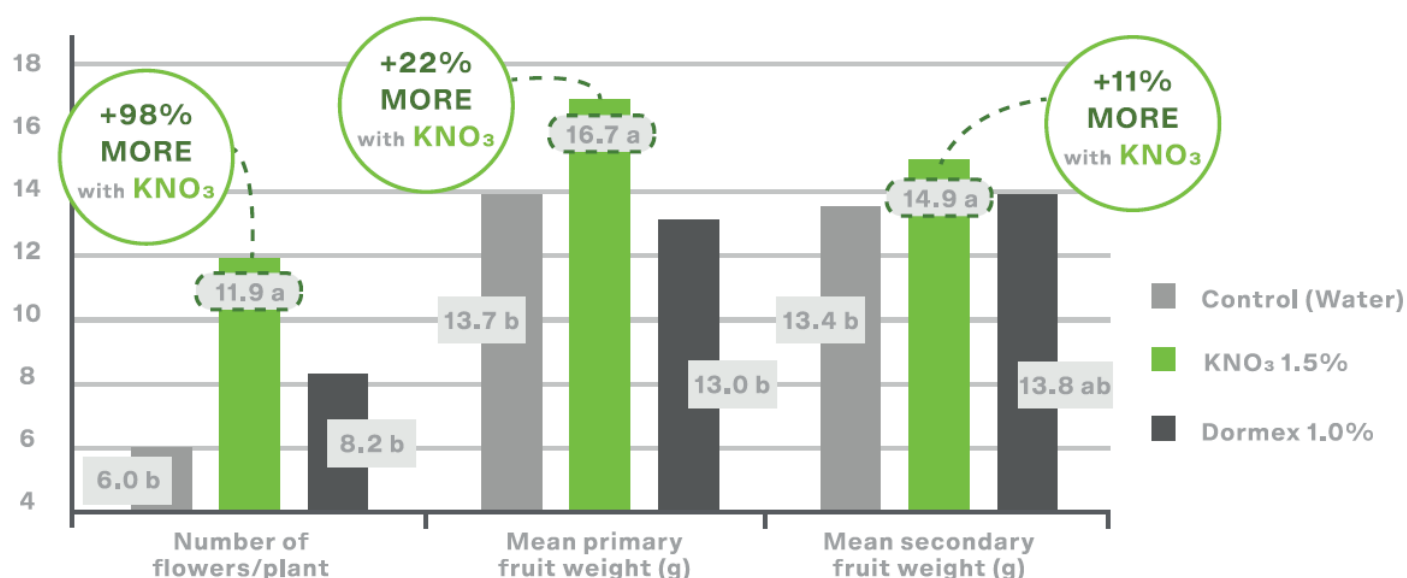
Source: Khayyat, M., S. Rajaei, M. Shayesteh, A. Sajadinia and F. Moradinezhad. 2010. Effect of potassium nitrate on breaking bud dormancy in strawberry (*Fragaria ananassa*, Duch.) plants. *Journal of Plant Nutrition*, 33: 1605-1611.

Potassium nitrate outperformed other dormancy breaking agents in increase of flowering and fruit weight of strawberry



Research shows the number of flowers of plants treated with both doses of KNO_3 in the foliar spray, increased significantly compared to the other treatments. Additionally, the average fruit weight of primary and secondary fruits of a fruit cluster were increased when 3% KNO_3 was foliar applied.

The effect of rest breaking agents on number of flowers and weight of primary and secondary fruits in strawberry cv. 'Merak' plants



Means with the same letter indicate that there are no statistically significant differences

Source: Eshghi, S., M.R. Safizadeh, B. Jamali and M. Sarseifi. 2012. Influence of foliar application of Volk oil, Dormex, gibberellic acid and potassium nitrate on vegetative growth and reproductive characteristics of strawberry cv. Merak. J. Biol. Environ. Sci, 6(16): 35-38.