

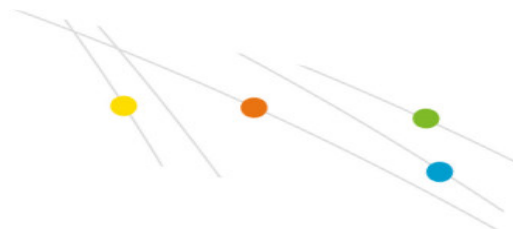
Combination of foliar applied potassium nitrate with 'Waiken' can effectively break floral bud dormancy in peach and nectarine.

An experiment was conducted in Khun Wang (Thailand) on rest-breaking products to modulate rest and flowering on low-chill peach cv. Florda Grande and nectarine cv. Sun Wright. Trials were conducted on 5-year-old tress using randomized complete block designs, with treatments applied to six single tree replicates. Treatments were: control (water), KNO_3 5%, Waiken (fatty acids) 2%, Waiken 2% + KNO_3 5%, Waiken 4% and Waiken 4% + KNO_3 5%. Rest-release treatments were applied on 7 November 2001 in year 1 and on 20 November 2002 in year 2. All treatments were already sprayed eight times with 2,5% KNO_3 in autumn. The combination of Waiken + KNO_3 exhibited a higher bud break percentage compared to the control in peach and nectarine (Table 1 & 2), advanced flowering by up to 1-2 weeks and concentrate flowering intensity. Waiken and KNO_3 may increase fruit set and resulted in increased yield per tree in Florda Grande and Sun Wright varieties (Table 1 & 2). No effect on fruit quality of peach and nectarine was found in this study.

Table 1. Effect of treatments on flower bud break and yield of peach var. Florda Grande.

Treatment	Flower bud break (%) 2002	Yield/tree (kg) 2003	Yield/tree (kg) 2003
Control	69,8 ab	13,2	2,6 b
KNO_3 5%	69,4 ab	11,8	5,3 ab
Waiken 2%	62,5 b	13,2	5,7 ab
Waiken 2% + KNO_3 5%	74,0 ab	14,0	6,4 a
Waiken 4%	64,9 b	12,3	3,4 ab
Waiken 4% + KNO_3 5%	80,0 a	11,3	5,4 ab

Table 2. Effect of treatments on flower bud break and yield of nectarine var. Sun Wright.



Treatment	Flower bud break (%) 2002	Yield/tree (kg) 2003	Yield/tree (kg) 2003
Control	85,5	3,0 b	3,6
KNO ₃ 5%	89,3	4,3 ab	4,6
Waiken 2%	93,7	4,7 ab	3,5
Waiken 2% + KKNO ₃ 5%	99,0	4,5 ab	4,2
Waiken 4%	95,6	5,7 a	5,3
Waiken 4% + KKNO ₃ 5%	94,7	3,7 ab	3,4