EFFECT OF NITRATE SOURCES ON MANGO FLOWERING

J.A. ALBUQUERQUE; M.A. MOUCO & V.C. SILVA

EMBRAPA-CPATSA, Cx. Postal 23, Petrolina, PE

The use of nitrate compounds for breaking dormancy of flowering buds in mango trees anticipates and makes the flowering more homogeneous. The objective of this work was to compare the efficiency and economical aspect of the use for potassium nitrate (KNO3), ammonium nitrate (NH4NO3) and calcium nitrate (Ca (NO₃)₂) on the induction of mango flowering in the Submedio São Francisco region, Northeast Brazil. Three-year old plants, cv. Tommy Atkins, were used in randomized complete block design, with five treatments and five replications. Regarding plant toxicity, the treatment with ammonium nitrate, at 1.5% concentration, caused leaf burning. The three products were efficient for breaking the dormancy of mango flowering buds. However, the effect of ammonium nitrate was more retarded. Taking into consideration the incidence of internal collapse of mango fruits in the region and that this is related to calcium and nitrogen levels, the use of calcium nitrate would be more interesting. Regarding costs, the most expensive product is potassium nitrate, followed by calcium nitrate and by ammonium nitrate.