EVALUATION OF POTASSIUM SOURCES IN AVOCADO IN TANCITARO, MICH.

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Potassium is the main nutrient in avocado fruit reaching up to 50 kg of potassium per 10 ton of fruit; nevertheless, just 24% of fertilizer applied by producers contains potassium. The aim of this paper was to evaluate different sources of potassium fertilizers and its effects on fruit nutrition and yield. This experiment was conduced in Tancitaro, Mich., in a twelve-year-old orchard from January 2004 to December 2006. Treatments evaluated were 1. Solupotasse applied to soil (S), 2. Solupotasse applied to soil plus foliar Solupotasse 3% (S+F), 3. Granupotasse applied to soil (G), 4. Granupotasse applied to soil plus 3% foliar Solupotasse (G+F), and 5. KNO₃ applied to soil. Data collected were pH, salinity and +K concentration of soil solution; also K foliar (%), Yield and quality fruit, dry matter, fruit size and oil fruit content were measured. Results indicated that soil pH and salinity are not modified by potassium sources with mean values of 6.8 and 0.35 mS cm⁻¹, respectively.+ K available was higher in KNO₃ with an average of 70 ppm, followed by G with 46 ppm, being S the lowest with 34 ppm. K foliar (%) was higher in G+F (1.09%) and the lowest was KNO₃ with 0.89 %. The percentage of fruit dry mater content was higher in S with 23.4% against 23.1% in G+F and 20.6% in G. Yield fruit was higher in G+F with 130.9 kg tree⁻¹, followed by S+F with 130.4 kg tree⁻¹, G 116.5, S with 89.5 and KNO₃ with 103.3 kg tree⁻¹ average after three years.