

ARTÍCULO CIENTÍFICO

DENSIDADES POBLACIONALES Y FERTILIZACIÓN NITROGENADA EN MARACUYÁ

Alvarez, Hugo^a; Pionce, Joffre^b; Castro, José^a; Viera, William^{a*}; Sotomayor, Andrea^a

^a Instituto Nacional de Investigaciones Agropecuarias (INIAP). Programa de Fruticultura. Av. Eloy Alfaro y Av. Amazonas, Quito, Ecuador.

^b Becario SENESCYT. Carrera Agropecuaria, Universidad Estatal del Sur de Manabí. Km 1 1/2 Vía Noboa S/N Campus Los Angeles - Jipijapa- Ecuador.

POPULATION DENSITIES AND NITROGEN FERTILIZATION IN PASSION FRUIT (*Passiflora edulis* Sims f. *flavicarpa* Deg.)

Abstract

Passion fruit is a plant population that respond satisfactorily to the right appropriate seed and nitrogen additions. The aim of the research was to determine the best population density and nitrogen source, related to the productivity and quality of fruit passion fruit. The factors studied were the densities; 555 plants ha⁻¹ (3 m between rows x 6 m between plants), 667 plants ha⁻¹ (3 m between rows x 5 m between plants) and 883 plants ha⁻¹ (3 m between rows x 4 m between plants); and as nitrogen sources: urea (CH₄N₂O), calcium nitrate Ca(NO₃)₂, potassium nitrate (KNO₃) and ammonium nitrate (NH₄NO₃). The best yields per hectare were obtained at the planting densities of 667 and 833 plants. The highest fruit weight did not occur with the lowest planting density (833 plants ha⁻¹). Potassium nitrate produced fruits of lower weight. In general, no interaction between densities and nitrogen sources was observed, except for the variable fruit weight.

Keywords: nitrogen, yield, planting distances.

*Correspondencia: Instituto Nacional de Investigaciones Agropecuarias – Programa Nacional de Fruticultura, Granja Experimental Tumbaco, Av. Interoceánica km 15, Tumbaco, Ecuador. Teléfono: +(593) 2 2301057. e-mail: william.viera@iniap.gob.ec