

Criolla Roja type guava fruit (*Psidium guajava* L.) growth

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Abstract

Growth dynamics of Criolla Roja type guava fruits were studied in an experimental plot, located in Centro Fruticola del Zulia-CORPOZULIA in Mara county Zulia state, Venezuela. 6572 floral blossoms were marked on 24 trees. Each week, 17 destructive samplings were made starting from the floral blossom stage up to the physiological fruit ripening stage. Relative growth rates (RGR) were used as a physiological parameter indicator of the growth between stages. A randomized block design was used, taking 17 ages as treatments and four repetitions of six plants each. Simple statistics, ANOVA and Tukey's Student Range were applied. The time lapsed between preanthesis and anthesis was seven days, and 15 days from antesis to fruit-set. The cycle from fruit-set to physiological maturity lasted 119 days. The accumulated growth curve for fresh and dry mass, polar and equatorial diameter, corresponded to a double sigmoide. Stage I of the curve was extended to 70 days. Fresh and dry mass presented similar kinetics and the greatest RGR occurred at the level of stages I and III, while it decreased significantly in stage II.

Key words: Guava, development, growth dynamics, physical variables.

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