

3rd International Symposium on Guava and Other *Myrtaceae*



Effects of application of guava processing residue on the nutrient content in guava fruit and post-harvest quality

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The use of residue from the guava industrial processing could partially replace mineral fertilizer, in view of the relatively high nutrient content contained in this product, reducing the environmental impacts of its accumulation and reducing the cost of fruit production areas. Given the scarcity of information in the literature and the importance of proper management of organic residues in agriculture, this work aimed to evaluate the effects of application of the residue in an Ultissol, determining the chemical changes induced in guava fruits and in their post-harvest attributes. The experimental design was randomized blocks with seven treatments and four replications: doses of the residue (grounded) equal to zero, 9, 18, 27 and 36 t ha⁻¹ (dry weight), dose of 18 t ha⁻¹ of non-grounded residue, and the recommendation of mineral fertilizers. Applications and evaluations were made in 2006, 2007, 2008, 2009 and 2010. The results indicated that increasing the doses there was an increasing N content and a decreasing Ca content in fruits. The residue doses did not influence the post-harvest attributes of guava.

Keywords: *Psidium guajava*, organic manure, by-product.

Acknowledgement: To FAPESP and CNPq for the research support, and to FAPESP for a PhD scholarship to the second author.

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