

Abstract:

The first step in processing of macadamia is the removal of the husk (Cavaletto, 1983). Husk removal is normally accomplished on farm by mechanical dehuskers (Luan and Liang, 1983). Physical damage to macadamia kernel may result from postharvest handling of nuts (O'Hare et al., 1996), for example, from dehusking machines. There is currently limited information available on the effects of different dehuskers on the quality of macadamia kernel, particularly percentage of whole kernel recovered, "shoulder damage" and production of pieces. Shoulder damage is tearing of the kernel around the apex region. There are two main types of dehusker in use in the industry. One is the "Shaw" type, which employs a scrolled roller and spring-loaded fingers. Another is the "Admac" machine, which uses an auger working against rubber padding. We compared the effects of the two types of dehusker on nuts at high and intermediate moisture content (MC) using hand dehusking as a control. The aim was to compare the effect of dehuskers operating at a lower moisture content such as may be the case in very dry seasons and when there is a long time between harvest rounds.