Physical Properties of Three Maize Varieties

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ABSTRACT

Physical properties of kernels, grains, and seeds are necessary for the design of equipment to handle, transport, process and store the crop. An experiment was conducted at College of Agricultural Engineering, Bapatla during 2012-13 to evaluate the physical properties of maize kernels (DHM 117, DHMM 115, and PIONEER B12) as function of moisture content (12 to 20 % w.b.) The maize kernel length, width, thickness, geometric mean diameter, surface area, sphericity and kernel volume increased linearly with increase in moisture content. But the bulk density decreased with increase in its moisture content from 12 to 20 % wb, while true density porosity and thousand grains mass increased with increasing moisture content.

Key words : Maize, Moisture Content, Physical Properties.