EFFECTS OF OPERATING PARAMETERS OF A SCREW PRESS ON SOYA BEAN OIL YIELD

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ABSTRACT

The effect of operating parameters (screw speed and choke clearance) of a screw press on soya bean oil yield was investigated in this study, using factorial experimental design. Both the screw speed (within the range of 70 to 110 rpm) and choke clearance (within the range of 1 to 3 mm) studied, produced significant differences in soya bean oil yield. Analysis of results showed that the values of the screw press variables for high soya bean oil yield are screw speed of 110 rpm and choke clearance of 1 mm. The result of this study would be useful for rational design and development of soya bean oil screw press.

Keywords: Choke clearance, screw press, screw speed.