

**Title** Factors Affecting Design of a Pummelo Sizing Machine  
**Author** Bundit Jarimopas, Boonwich Sirisawas  
**Citation** Proceedings: Abstract Summary, International Conference on Agricultural, Food and Biological Engineering & Post Harvest/Production Technology, Sofitel Raja Orchid Hotel, Khon Kaen, Thailand, 21-24 January 2007. 204 p.  
**Keywords** Pummelo; Sizing

#### **Abstract**

The purpose of this research was to determine factors affecting the design of a pummelo sizing machine. A diverging belt was selected as the sizing mechanism, which suited the conical shape of the pumelo. Variation of two design factors, i.e. belt speed S, belt angle A and fruit orientation, were observed against the sizing machine performance. Testing and ANOVA evaluation were conducted with the experimental sizing machine. Results showed that S and A and fruit orientation significantly influenced the machine performance at the significance level of 5%. The proper factors conditioning the best sizing were the belt speed of 14.5m/min, belt angle of 75 degrees and stem end of the pummelo, pointed upward.