

Title            Design and Develop the Chili Size Grader  
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Citation       Proc. Of the 1<sup>st</sup> KMITL International Conference on Integration of Science & Technology for  
                    Sustainable Development, Bangkok, Thailand. 25-26 August 2004. Vol.2: 141-144.  
Keyword:      Chili size grader; Sorting screen; Vibrating system

### **Abstract**

The objective of this research was to design and to develop the chili size grader for sorting the chili for export. This grader consists of four main parts: a framework, a sorting screen, an adjuster of screen inclined angle, and a vibrating system. The chili size grader sorts chilies according to their thickness. The movement and position of chilies were controlled by vibrating force. While the machine was operated, chilies moved and arranged in the row of a sorting screen and then chilies were separated into two groups. In the first group, the undesired chilies or the small-size chilies with diameter less than 6 mm, fell from the screen while the desired group, diameter greater than 6 mm, moves continuously to the container. The experimental results showed that the chili size grader yield maximum sorting efficiency of 99.4 percent and maximum sorting error of 7 percent at 15 degree of the inclination of the sorting screen and 35 kg/hr of sorting speed.