

<b>Thesis Title</b>	Effect of ripening stage, hydrocolloid and starches on properties of mango leather.
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### **ABSTRACT**

Mango leathers are a snack product which is generally popular but their appearance has not modernized. The objective of this research is to develop dried mango slice which can be leather but do not stick to our hands. This research is studying suitable types and quantities of substances for modifying the meat, and has selected “Kaew” mango to be the material used in dried mango slice production. According to the research on dried mango slice production, mango slices which are made using mango which has 70% of maturation rate, or ready to eat, are better than mango leathers which are made using raw mango, half - ripe mango, or mature mango. When developing with suitable substances to modify the meat, Agar, is used in solution concentration of 2% by mixing the mango and Agar solution proportionately; 10:3. This can reduce the stickiness while hardness and tensile strength value are 5.30 N and 2.254 N/mm<sup>2</sup>. In mango leathers which are control examples, hardness and tensile strength value are 10.30 N and 4.216 N/mm<sup>2</sup>, and we can produce a nutritious product with interesting features by adding cereal. The mango leathers produced during this research do not stick to our hands. Hardness and tensile strength value of mango leathers which are mix with agar solution and cereal are reduced to 4.3 N and 2.012 N/mm<sup>2</sup>, light value (L\*) is 54.47±2.141, red value (a\*) 9.341± 2.73 and yellow value (b\*) 42.25±2.14. Moreover, this product is accepted by consumers. After studying about the packing of developed mango leathers, at room temperature, aluminum laminated foil packing (no vacuum) can reduce the spoilage and maintain the texture better than it is kept in a plastic pack