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Preparation of an Intelligent pH Film Based on Biodegradable Polymers and Roselle Anthocyanins for Monitoring Pork Freshness

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ACCEPTED MANUSCRIPT

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| 2 | Preparation of an Intelligent pH Film Based on Biodegradable Polymers |
| 3 | and Roselle Anthocyanins for Monitoring Pork Freshness |
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| 14 | Abstract |
| 15 | This study aims to develop an intelligent indicating film based on biodegradable |
| 16 | polymers incorporated with roselle anthocyanins to monitor pork freshness. Three |
| 17 | different films were prepared by using two substances of starch, polyvinyl alcohol and |
| 18 | chitosan. The UV-vis spectra and color of anthocyanins changed at pH 2-12. SEM |
| 19 | photographs showed that the compatibility of films were improved with the addition |
| 20 | of anthocyanins. Furthermore, the polyvinyl alcohol/ chitosan/ roselle anthocyanins |
| 21 | film had the highest tensile strength (98.28MPa). The starch/polyvinyl alcohol/roselle |

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