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Effect of soaking time for performance of mechanical pepper *(Piper nigrum* L.) decorticator

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White pepper is the seed kernel of black pepper *(Piper nigrum* L.*).* It is a basic value added product having a higher price than black pepper in local and international markets. Sri Lankan farmers are reluctant to resort to white pepper production due to the absence of a convenient method to decorticate. The Department of Export Agriculture introduced a mechanical pepper decorticator. The operation capacity of the decorticator was 200 kg per hour. It is 20 times greater than traditional decorticating. This study was conducted to identify an appropriate soaking period and to assess the performance of the decorticator. Well matured berries of Pannyiur variety was used for the study. Soaking times 1, 2, 3, 4 and 5 days were the treatments of the study and while no soaking was used for the control. Operating capacity, decorticating efficiency, effectiveness of wholeness of kernels and overall decorticating efficiency were determined. Decorticating efficiency gradually increased with soaking time. The lowest value was 77.6% and highest was 92.5% for the control and 5 days soaking time respectively. The overall decorticating efficiency increased up to the four day soaking period. Effectiveness of wholeness of kernels is the qualitative indication value and it was high at the 4 days soaking period. The best soaking period was 4 days which had an overall efficiency of 77%. The overall efficiency cab is enhanced by grading pepper berries according to size before decorticating. However, over soaking may lower the quality and colour of white pepper.

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