





















The results from the evaluation indicated a satisfactory performance of the stripper; the stripper will be able to handle up to two tons of oil palm fruit bunches in an 8 hours per day operation for 72 hours fermentation time, thus, making it suitable for the small and medium scale oil palm fruit processing industries in Nigeria.

It is recommended that further comprehensive performance evaluation be carried out on the stripper to determine the effects of bunch harvesting period, bunch ripeness before harvesting and speed of operation on the performance of the stripper and on the quantity and quality of the palm oil obtained after extraction.

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### **References**

1. Akande, F. B. 2001. Design and Construction of cassava washing machine. Bachelor of Engineering Project Report. Department of Agricultural Engineering, Federal University of Technology, Minna, Nigeria.
2. Aremu, A.K and Alade, O.A. (2017); Development of a Palm Fruit Bunch Chopper and Spikelet Stripper. International Journal of Engineering Science Invention. Volume 6, Issue 2. Pp.47-53.
3. Food and Agriculture Organization (FAO). Small Scale Palm Oil Processing in Africa. FAO Agricultural Bulletin 148. Goggle Search. 30/3/2011.
4. Gebr Stork. 1960. Bunch stripping and stripping machines. Stork palm oil Review, Amsterdam: Gebr Stock & Co's Apparatuses fabric N.V. 1 (4).
5. Khurimi, R.S and Gupta, J.K A, 2005. Textbook of Machine Design (S.I. Units). Eurasia Publishing House (PVT) LTD. Ram Nagar, New Delhi. 4<sup>th</sup> Edition 509-557.
6. Ojomo A. O., Ologunagba F. O. and Alagha S. A. 2010. Performance Evaluation of a Palm Fruit Bunch Stripper. ARPN Journal of Engineering and Applied Sciences. Vol. 5, No. 9.
7. Obiakor S.I. 1998. Improvement of the prototype NCAM oil palm fruit processing system. Agricmech (1) 1, 32 –35.
8. Oshiobugie, E.V, Atamnah, A, Nnebuife, G.O and Araivie. E.G (2017) Design of a Palm Bunch Stripper Machine Suitable for Use in Edo state Nigeria. International Journal of Science and Research Publications. Volume 7.

9. Sivasothy, K., Mohd Halim, R., and Basiron, Y. 2005. A New System for Continuous Sterilization of Oil Palm Fresh Fruit Bunches. *Journal of Oil Palm Research* Vol. 17 December 2005, P. 145- 151.
10. Suryanto, H. and Bardaie, Z. 1996. *Design* parameters for stripping fresh oil palm fruitlets. *Agricultural Mechanization in Asia and Africa (AMA)*. 27 (3) 51-56.

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