Mathematical modeling of respiration rate of moringa pods

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■ **ABSTRACT :** Respiration rate is dependent on factors like storage temperature and composition of storage atmosphere, a mathematical approach to predict the respiration rate under given conditions would be an immense help in both design and process control of such storage systems. Experimental data were generated at temperatures of 14 and 28°C for moringa pods using the closed system method. The generated data were used in the model developed by Menon and Goswami (2008) for mango model based on regression analysis. The model was tested for its validity at 21°C and it showed good agreement with the experimentally estimated respiration rate.

■ **KEY WORDS :** Respiration rate, Oxygen, Carbon dioxide