

Dry matter, moisture, ash and crude fibre content in distinct segments of ‘Durian Kampung’ husk

ABSTRACT

An environmental friendly approach for disposal of voluminous durian husk waste could be implemented by substituting them into various valuable commodities, such as healthcare and biofuel products. Thus, the study of composition value in each segment of durian husk was very crucial to determine the suitable proportions of nutrients that need to be added and mixed in the product. A total of 12 ‘Durian Kampung’ fruits from Sg Ruan, Pahang were selected and each fruit husk was divided into four segments and labelled as P-L (thin neck area of white inner husk), P-B (thick bottom area of white inner husk), H (green and thorny outer husk) and W (whole combination of P-B and H). Four experiments have been carried out to determine the dry matter, moisture, ash and crude fibre content. The results show that the H segment has the highest dry matter content (30.47%), while the P-B segment has the highest percentage in moisture (81.83%) and ash (6.95%) content. It was calculated that the ash content of the P-B segment has a higher rate of moisture level which causes the ash content to increase about 2.89% from the P-L segment. These data have proven that each segment of durian husk has a significant difference in terms of composition value, which might be useful information to fully utilize every part of the durian husk in the future.

Keyword: Durian husk; Crude fibre content; Dry matter content; Moisture content