

**EVALUATION OF THE PHYSICAL DURABILITY OF
FEED PELLETS PRODUCED IN A COMMERCIAL FEED
MILL IN SRI LANKA**

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Abstract

Evaluation of the physical durability of feed pellets was done by checking of the pellet durability index values of the pellet feed types. Samples were collected from six different types including layer chick booster, layer custom, layer grower feed, broiler starter, broiler finisher and broiler chick booster. All together 120 samples have been collected to analyze the pellet durability index (PDI). Acceptance pellet durability index level of the pellet feeds is higher than 85% level. The analysis of results revealed the mean durability values of all the experimental feeds are recorded higher the acceptant level. However, layer chick booster diet had shown a significantly lower pellet durability compared to broiler finisher and layer grower feed. The effect of raw material proportions in the feed to pellet durability showed rice polish is having high influence to the binding ability of the pellets than the corn and soy bean meal. As a result broiler finisher and layer grower having high PDI values such as 93.27% and 92.95% respectively. However, layer chick booster is having high rice polish proportion although this feed is having lowest durability values. The lower pellet durability value observed in layer chick booster may have contributed from the presence of low ration of corn and soy bean meal compared to rice polish in the feed. Therefore, there is an effect to the binding ability from corn and soybean meal other than rice polish.