B-55 Investigation on the possbility of using wheat flour as a binder in shrimp feeds

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In shrimp farming, feed is the single largest operating cost item which ranges from 50% to 70% of the total variable cost of production. Shrimp pellets should be physically stable to minimize disintegration and loss of water-soluble nutrients upon exposure to water during the ingestion process. Water stability of pellets can be improved through the use of binders. A wide variety of natural, modified or synthetic products have been tested as binders with varying degrees of success. This experiment was conducted to investigate the possibility of using wheat flour as a binder of shrimp feed and its economic feasibility.

Two rations were formulated using wheat flour as a binder at 2 different levels; 14.5% and 20%. The prepared feeds were tested for water stability employing the wet durability test. The percentages of dry matter retained after 8 h were 87.12% and 86.85% respectively.

There is no statistically significant difference between the 2 treatments in terms of water stability of pellets. Even after 8 h in sea water, the pellets in both treatments have shown satisfactory water stability. Also, these results are comparable with the results which have been obtained using commercial binders in terms of water stability and cost.

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