

Supatchalee Supjarean 2007: Development of Leave on Hair Care Product with Rice Bran Protein. Master of Science (Agro-Industrial Product Development), Major Field: Agro-Industrial Product Development, Department of Product Development.
Thesis Advisor: Assistant Professor Hathairat Rimkeeree, Ph.D. 174 pages.

The aim of this research was to develop leave on hair care product with rice bran protein. According to the consumer survey, 92.9 % of consumers were interested in buying this product because the product has natural ingredient and gives another alternative for choosing the leave on hair care product. In studying the extraction of rice bran protein from defatted rice bran without precipitation of protein at pH 4.5 prior to freeze drying, it was found that yields of rice bran protein was 19.94%. Percentage of protein was 30.53. It were rich in glutamic acid, arginine and aspartic acid respectively. The formulation of Leave on hair care with rice bran protein consisted of: 0.26% Carbopol polymer, 3.50% Sodium acrylate and acryloyldimethyltaurate copolymer and polysorbate 80, 1.75% Rice bran protein, 8.74% Dimethicone, 0.18% Paradise'n green apple and 0.44% green color solution (0.1% w/v). The qualities of leave on hair care with rice bran protein was 2,507 cP of viscosity, 5.00 of pH, soft green color with L* a* b* value of 76.82, -8.81, 21.85 and no separation of water phase and oil phase. The total plate count of bacteria and yeast/mold were less than 10 colony/g. Total cost of leave on hair care with rice bran protein was 40.39 baht/bottle (60 g). The product was stable during 8 weeks storage at room temperature (28-30 °C), 35 °C and 45 °C. The consumer test showed that 96% of consumers accepted the product and the overall liking was like moderately.

Student's signature

Thesis Advisor's signature