

## News &amp; Comments

## The Technical Characteristics of Balut from Mallard Duck Eggs

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The Filipino dish balut, which is produced from incubated duck eggs, is well-liked throughout the ASEAN region. Balut sa puti and balut mamatong, in which the embryo floats above the yolk and is white, are the two varieties that are created and sold in the market (i.e., the embryo is covered with white). An F1 hybrid between IP-Khaki (male line) and IP-Itim produced the Kayumanggi-IP breed (female line). The NSPRDC produces and advertises it across the country as a superior breed for farmers of ducks since only females have brown plumage, while males only have black. In terms of egg composition, shell thickness, and egg form, this study attempted to compare the traits of two types of balut (B15d and B18d).

A total of 524 duck eggs were randomly collected for incubation in seven batches from three Itik-Pinas (IP) breeds (IP-Itim, IP-Khaki and Kayumanggi-IP). The IP breeds were raised in similar farm conditions at NSPRDC, DA-BAI in Tiaong, Quezon. Of the 524 eggs put in the incubator, about 10.05% were identified as infertile eggs, 7.76% were penoy and 82.19% balut. Using the SAS CORR function, the Pearson product-moment correlation coefficients between balut components and their correlations with shell thickness and egg shape parameters were calculated.

In balut, the terms "yolk" and "yolk sac membrane" are used interchangeably. Lipids, fats, and energy for tissue expansion throughout embryonic development are mostly obtained from the yolk. The term "albumen in balut" refers to the solidified albumen and sub-embryonic fluid in the albumen sac, which is produced from the chorioallantoic membranes and is found beneath the growing embryo. To constantly produce more balut, the breeding flock must have a high fertility rate. As a result, fewer penoy and sterile eggs are created during the manufacturing of balut. Only a smaller fraction of the same batch of incubated eggs may be kept in the incubator for an additional 3 days to make B18d balut, depending on the farm capacity and increased consumer demand for B15d balut. Balut with smaller embryos, a larger percentage of yolk, and a reduced albumen content are frequently preferred by local consumers. The albumen's firm, solid texture when cooked makes it less appetizing. In this regard, in B15d balut, IP-Itim had the largest weight and proportion of yolk (22.3 g and 35.31%) and the lowest weight and proportion of embryo (6.6 g and 10.60%).

According to consumer preferences, the technical qualities of B15d and B18d balut may be taken into account while selecting the breed to be utilized in balut manufacturing. In nucleus flocks, the IP-Itim and IP-Khaki breeds ought to be improved and protected. The commercial production of Kayumanggi-



IP ducks by multiplier farms ought to utilize these breeds.

**JOURNAL REFERENCE**

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**KEYWORDS**

Balut, egg components, mallard ducks, duck eggs, Filipino food

