

IMPROVED MPOB-HIE IN BROILER FINISHER FEED

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MPOB-HIE is formulated with 100% Malaysian refined, bleached and deodorized (RBD) palm products. It is scientifically designed and formulated to replace crude palm oil (CPO) in the manufacture of total mixed rations (TMR) for finisher broilers.

ADVANTAGES OF USING MPOB-HIE

- Available throughout the year and can be delivered 'just in time' (JIT) within Malaysia;
- Less expensive than and superior to CPO;

- Easily mixed, not oily;
- Palatable and readily consumed by broiler finisher chicken;
- Free from pathogenic and spoilage microbes;
- High content of vitamin E; and
- *HALAL*.

SUMMARY

A total of 8500 ROSS broiler chicks were used in this study to evaluate the growth performance of broiler chicken on diets formulated with fat energy from Improved MPOB-HIE.

TABLE 1. TOTAL WEIGHT GAIN, FEED CONSUMPTION AND FEED EFFICIENCY OF MALE ROSS BROILERS FINISHER FED WITH RATION FORMULATED WITH MPOB-HIE ON DAY 35

Ration	Total feed consumption* (kg)	Total weight gain* (kg)	FCR*
MPOB-HIE 6% (T1)	1246.10 ^b	870.10 ^b	1.43 ^{ab}
MPOB-HIE 6% A3 (T2)	1291.92 ^a	875.13 ^b	1.48 ^a
MPOB-HIE 6% A6 (T3)	1281.29 ^a	927.25 ^a	1.38 ^b

Notes: * $p < 0.05$.

^{a,b} Mean values within the same column with different superscripts are different ($p < 0.05$).
FCR - feed conversion ratio.

TABLE 2. TOTAL WEIGHT GAIN, FEED CONSUMPTION AND FEED EFFICIENCY OF FEMALE ROSS BROILERS FINISHER FED WITH RATION FORMULATED WITH MPOB-HIE ON DAY 35

Ration	Total feed consumption* (kg)	Total weight gain* (kg)	FCR*
MPOB-HIE 6% (T1)	1125.06 ^b	766.82 ^a	1.47
MPOB-HIE 6% A3 (T2)	1185.09 ^a	808.29 ^b	1.47
MPOB-HIE 6% A6 (T3)	1182.75 ^a	812.22 ^b	1.46

Notes: * $p < 0.05$.

^{a,b} Mean values within the same column with different superscripts are different ($p < 0.05$).
FCR - feed conversion ratio.

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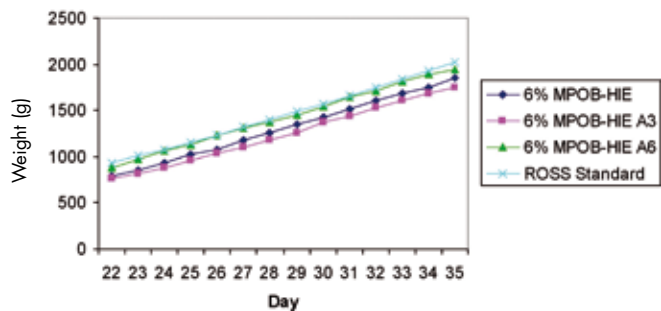


Figure 1. Growth of male ROSS broilers from Day 22 until finish on Day 35.

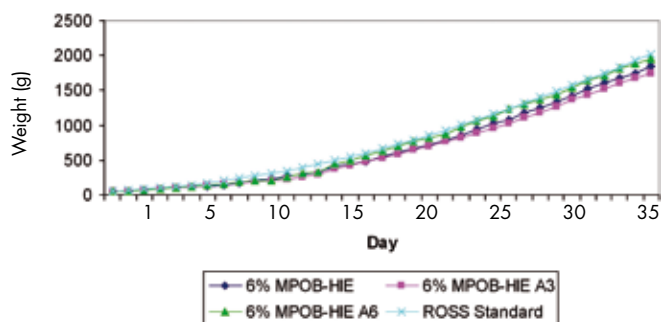


Figure 2. Growth of male ROSS broilers from Day 1 until finish on Day 35.

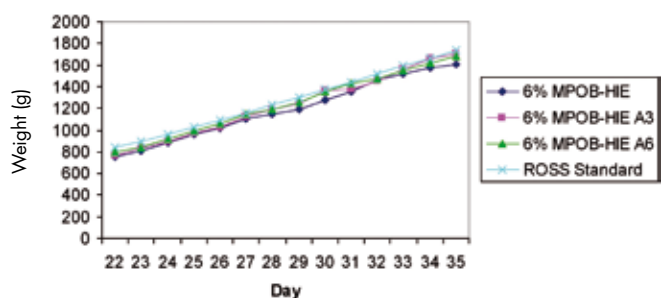


Figure 3. Growth of female ROSS broilers from Day 22 until finish on Day 35.

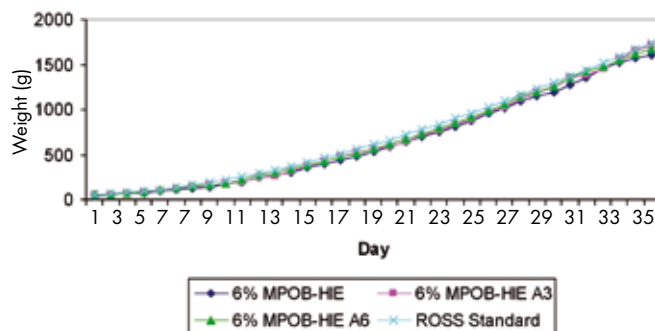


Figure 4. Growth of female ROSS broilers from Day 1 until finish on Day 35.

Day-old ROSS broiler chicks were fed with starter feed until Day 21. From Day 22 to Day 35, the broilers were fed finisher feeds containing Improved MPOB-HIE, some with food additives. There were three feeds with MPOB-HIE, each fed to 2833 birds - T1 6% MPOB-HIE, T2 6% MPOB-HIE with 0.3% additives (A3) and T3 6% MPOB-HIE with 0.6% additives (A6). The birds were housed in a Climatic Control House (CCH) with drinking water available *ad libitum*.

Rations with additives (T2 and T3) were more effective to support finishing of the broilers as compared to T1 (MPOB-HIE without additive). Ration T3 performed the best with highest cumulative body weight gain of male and female ($p < 0.05$) broilers. Total feed consumption by male and female broilers fed T3 was the highest ($p < 0.05$), followed by T2 and T1. This was evidence that MPOB-HIE with added food additives was effective to enhance digestibility. The feed efficiency on Day 35 for the male broilers was 1.43, 1.48 and 1.38 for T1, T2 and T3, respectively, and for the female broilers 1.47, 1.47 and 1.46, respectively. The feed efficiency for male broilers showed a difference ($p < 0.05$) between the treatments, but not for the female broilers.

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