

IMPROVED MPOB-HIE IN BROILER STARTER FEED

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MPOB-HIE is a high fat energy feed ingredient made from refined palm oil products, meant for replacing crude palm oil (CPO) in formulating total mixed rations (TMR) for starter broilers.

ADVANTAGES OF USING MPOB-HIE

- Adequate supply and availability throughout the year. 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 starter chicks;
- Free from pathogenic and spoilage microbes;
- Provides additional 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 Improved MPOB-HIE.

TABLE 1. TOTAL WEIGHT GAIN, FEED CONSUMPTION AND FEED EFFICIENCY OF MALE ROSS BROILERS STARTER FED WITH RATION FORMULATED WITH MPOB-HIE FROM DAY 1 TO DAY 21

Ration	Total feed consumption* (kg)	Total weight gain* (kg)	FCR*
MPOB-HIE 6% (T1)	393.44 ^c	349.37 ^b	1.13 ^a
MPOB-HIE 6% A3 (T2)	415.51 ^b	354.87 ^b	1.12 ^a
MPOB-HIE 6% A6 (T3)	432.38 ^a	387.31 ^a	1.12 ^a

Notes: *p<0.05.

^{a,b,c} Mean values within the same column with different superscripts are different (p<0.05).

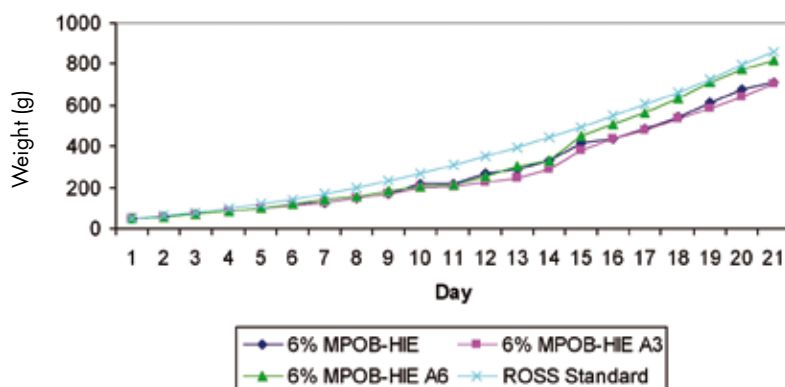


Figure 1. Growth of male ROSS broilers fed on starter rations from Day 1 to Day 21.



TABLE 2. TOTAL WEIGHT GAIN, FEED CONSUMPTION AND FEED EFFICIENCY OF FEMALE ROSS BROILERS STARTER FED WITH RATION FORMULATED WITH MPOB-HIE FROM DAY 1 TO DAY 21

Ration	Total feed consumption* (kg)	Total weight gain* (kg)	FCR*
MPOB-HIE 6% (T1)	373.28 ^b	316.41 ^b	1.18 ^a
MPOB-HIE 6% A3 (T2)	401.68 ^a	339.29 ^a	1.18 ^a
MPOB-HIE 6% A6 (T3)	413.39 ^a	346.88 ^a	1.19 ^a

Notes: * $p < 0.05$.

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

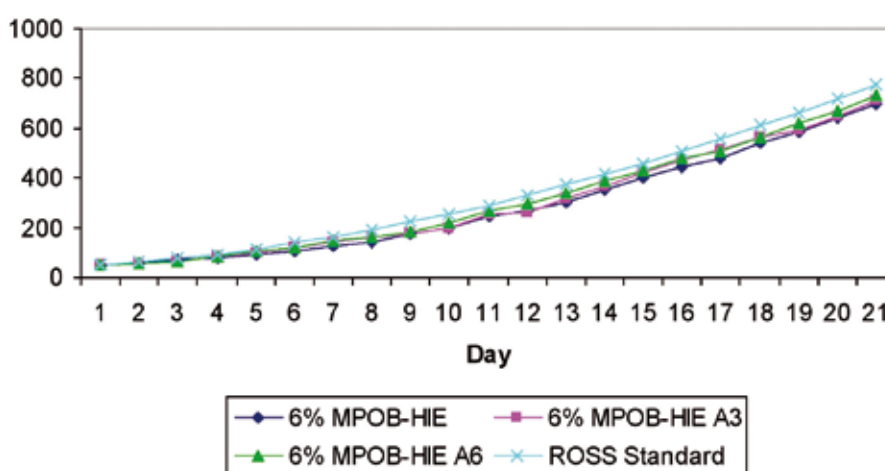


Figure 2. Growth performance of female ROSS broilers fed on starter rations from Day 1 to Day 21.

Day-old broiler chicks were fed starter feeds containing Improved MPOB-HIE, some with food additives until Day 21. There were three feeds, 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 were most effective ($p < 0.05$) to support weight gain of starter male and female broiler chicks as compared to T1 (MPOB-HIE without additive). Total feed consumption and total weight gain by the male and female broilers fed T3 were the highest ($p < 0.05$), followed by T2 and T1. This was an indication that the ration containing additives was more palatable and readily consumed by the broiler starter. The feed efficiency on Day 21 by the male broilers was 1.13,

1.12 and 1.12 for T1, T2 and T3, respectively and by the female broilers 1.18, 1.18 and 1.19, respectively. There were no significant differences in FCR value between the treatments, for both male and female broilers.

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