

Broiler Chick Study Design

Experimental Design

1. Animal type: Broiler chicks shall be obtained from hatchery on day of hatch (Day 0). Only chicks that appear healthy should be used in study.
2. Number of animals: 10 replicate pens/treatment × 35 birds/pen × 4 treatments = 1400 birds
3. Number of pens: 40
4. Number of animals and pens is subject to facility design; see examples, above.

Dietary schedule

Chicks to receive a 3-phase feeding program (starter, grower, finisher), with this period expected to be 35 to 42 days in duration. Finish weights and diet schedules may vary by the facility's best management practice.

Dietary treatments

1. Negative control (nutritionally adequate diet containing corn, SBM, dried whey, plasma, and fish meal; NRC, 2012) or local best management practice feed.
2. As 1 + 500g of BiOWiSH® MultiBio 3P per 1 metric tonne of feed through the pellet.
3. As 1 + 200g of BiOWiSH® MultiBio 3PS per 1 metric tonne of feed added to the mash feed.
4. Dietary treatments and ration formulas are subject to facility management practice; see typical examples, above.
5. The control and selected BiOWiSH® treatment should both be the same feed type as currently used on the farm. For example, if the farm uses pelleted feed the control pellet diet should be compared to the BiOWiSH® MultiBio 3P through the pellet application.

Please see BiOWiSH® MultiBio 3P and BiOWiSH® MultiBio 3PS User Guides for application protocols, storage and other product information.

Procedures

1. Chicks will be allotted to dietary treatments based on placement weight.
2. Chicks (35 per pen) will be provided ad libitum access to water and dietary treatments for duration of the feeding study, with body weight and feed consumption recorded every 14 days.
3. The facility best management practice feeding regimen will be used over the study period.

Data collection

1. Body weight and feed consumption determined at the conclusion of each dietary phase at 14, 28 and 42 days.
2. Mortality-corrected feed conversion ratio calculated for each dietary phase and cumulative through the study.

Key metrics

BiOWiSH Technologies recommends tracking the following metrics:

1. Growth performance: Calculated every 14 days and overall
 - a. Body Weight (BW)
 - b. Average Daily Feed Intake (ADFI)
 - c. Average Daily Gain (ADG)
 - d. Feed Conversion Ratio (FCR)
 - e. Mortality adjusted FCR
 - f. Days of production
2. Mortality

Technical support

Contact a distributor near you, email: animalag@biowishtech.com, or visit our website: www.biowishtech.com