

average of 10.90 pounds of mash per bird and weighed an average of 2.40 pounds per pullet. Mortality was 18.24 percent. They enumerated a number of advantages resulting from confinement-rearing of chicks. Buckner, Martin, and Insko (1) compared 3 methods of raising chicks: first, chicks kept in a colony brooder house with access to blue grass range and direct sunlight; second, chicks kept in the battery brooder the first 3 weeks and then transferred to the colony brooder house; third, chicks kept in the battery brooder during the first 22 weeks. The authors concluded that there were no great differences in rates of growth of the chickens raised. Hinds (5) compared different methods of confinement brooding, using brooder houses with concrete floor and concrete porch, wire floor and wire porch, and concrete floor with outside run. Results indicated little difference in rate of growth between lots. Mortality to 18 weeks of age was as follows: Using concrete floor and porch, 16.97 percent; wire floor and wire porch, 25.59 percent; and concrete floor and outside run, 16.12 percent. Hinds also reported on the rate of growth of chicks held in batteries 2, 4 and 6 weeks and then reared in a colony brooder house, and chicks started and reared in colony brooder house. Largest gains to 18 weeks of age were with the birds started in the colony house, followed by chicks held 2, 4 and 6 weeks in batteries and then reared in colony houses.

Callenbach, Nicholas and Margolf (2) stated that Barred Plymouth Rock pullets brooded in batteries were superior to those brooded on the floor on the basis of growth and efficiency of feed consumption up to 10 weeks of age. This was not true for the Single Comb White Leghorns.

Funk, Knandel and Callenbach (4) reported that variation in the growth of Single Comb White Leghorn chicks is not constant.

### EXPERIMENTAL PROCEDURE

The methods of brooding and rearing chicks used in these trials were as follows: In Lot I, chicks were confined to chick and growing batteries for the entire 20-week experimental period. Chicks in Lot II were kept in a wire-floored brooder house with a wire-floored sun-parlor for the duration of each trial. Chicks in Lot III were raised on a wooden floor and had access to "clean land". Chicks in Lot IV were brooded on a wooden floor and had access to "used land". Chicks in Lots II, III and IV were supplied heat with electric canopy type