

Daily collections of eggs were made and production records for individual hens were kept. Rate of egg production was calculated on a hen day basis. At the end of each 28 day period, the amount of feed required to produce a dozen eggs was calculated. This experiment was terminated at the end of the tenth month.

TABLE 4.—RATE OF EGG PRODUCTION, FEED EFFICIENCY AND MORTALITY OF PULLETS MAINTAINED IN CAGES AND ON THE FLOOR RECEIVING DIETS CONTAINING VARIOUS LEVELS OF PHOSPHORUS (EXPERIMENTS 3 AND 4).

Supple. P L'vcl Source	% Egg prod.		Lbs feed/doz eggs		% Mortality	
	Floor	Cage	Floor	Cage	Floor	Cage
	(exp. 3)	(exp. 4)	(exp. 3)	(exp. 4)	(exp. 3)	(exp. 4)
None	67.5	56.4	3.90	4.79	8.3	50.0
.05 D*	73.8	64.8	3.69	4.36	4.2	55.0
.05 S**	67.6	—	3.85	—	16.7	—
.10 D	74.4	67.5	3.66	3.88	2.8	30.0
.15 D	71.2	66.2	3.74	4.21	6.9	30.0
.15 S	69.0	—	3.78	—	5.6	—
.20 D	74.4	63.9	3.61	4.47	11.2	20.0
.20 S	66.4	—	3.96	—	9.6	—
.25 D	71.5	68.1	3.77	4.22	5.5	20.0

* Indicates supplemental phosphorus from defluorinated phosphate.

** Indicates supplemental phosphorus from soft phosphate.

Results.—Rate of egg production was improved when the basal diet was supplemented with 0.05 percent phosphorus from defluorinated phosphate (Table 4). This improvement of 10 percent approached the 5 percent level of probability when the entire laying period was considered. When production was considered for the last 5 months of the laying period a significant difference was found between the production for the pullets receiving the basal diet and the pullets receiving the diets containing supplemental phosphorus. Increasing the level of phosphorus above the 0.05 percent level resulted in a slight improvement in rate of egg production. However, production of the group receiving the 0.05 percent phosphorus was as good as that group receiving the 0.20 percent phosphorus. The highest