

### Summary

Growing and finishing pigs consumed from 54 to 64 grams of Microlite per head per day when it was available free choice from a self-feeder. It had no measurable affect on average daily gain, feed consumption, feed efficiency, or behavior of pigs eating a complete ration.

### Introduction

Microlite, an end product from a smectite-vermiculite mineral deposit strip-mined in southeastern Kansas, is being offered as a supplemental mineral for farm animals. It is guaranteed to contain 10% Mg, 5% Fe, and 2% K plus other mineral nutrients.

### Procedure

We offered Microlite to pigs free-choice in two separate trials. In the first trial 48 pigs averaging 67 pounds were randomly allotted (on the basis of sex, breed, and weight) to 6 pens and were fed to an average weight of 204 pounds on a complete, 16% crude protein, pelleted ration. Pigs in 3 pens had access to separate self-feeders containing Microlite.

In the second trial 60 pigs averaging 22 pounds were randomly allotted (on the basis of sex, breed and weight) to 6 pens and were fed for 28 days on the same complete ration, again with 3 pens having access to Microlite free choice.

All pigs were housed in controlled environment, slatted-floor buildings at the University Swine Research Center.

### Results and Discussion

Performance data from trials I and II are summarized in table 28. Pigs apparently like the flavor of Microlite. In trial I average consumption per pig per day was 64.7 gms (0.14 pound or approximately 2 1/4 ounces). As pigs were on slatted floors, some mineral may have been wasted unknowingly. It had no measurable affect on daily gain, feed efficiency, or behavior of the pigs.

Younger and smaller pigs were used in trial II. They consumed an average of 54.7 gms. (0.12 pound or approximately 1.9 ounces) per day of Microlite. Again it had no measurable affect on daily gain, feed efficiency, or behavior.

Table 28. Growing and finishing pigs with or without access to a mineral supplement.

| Indicated Item                  | Microlite not available | Microlite available |
|---------------------------------|-------------------------|---------------------|
| Growing - Finishing             |                         |                     |
| Number of pigs                  | 24                      | 23                  |
| Initial wt., lbs.               | 66                      | 67                  |
| Final wt., lbs.                 | 204                     | 205                 |
| Avg. daily gain, lbs.           | 1.88                    | 1.86                |
| Feed/gain ratio                 | 2.86                    | 3.00                |
| Avg. daily intake, lbs.         | 5.39                    | 5.62                |
| Avg. daily mineral intake, gms. | ----                    | 64.7                |
| Growing                         |                         |                     |
| Number of pigs                  | 29                      | 29                  |
| Initial wt., lbs.               | 22                      | 22                  |
| Final wt., lbs.                 | 51                      | 53                  |
| Avg. daily gain, lbs.           | 1.01                    | 1.10                |
| Feed/gain ratio                 | 2.12                    | 2.03                |
| Avg. daily intake, lbs.         | 2.19                    | 2.27                |
| Avg. daily mineral intake, gms. | ----                    | 54.7                |