

June, 1932

Bulletin No. 292

The Use of Water Bowls in the Dairy Barn

BY C. Y. CANNON, E. N. HANSEN AND JAMES R. O'NEAL

AGRICULTURAL EXPERIMENT STATION
IOWA STATE COLLEGE OF AGRICULTURE AND
MECHANIC ARTS

C. F. CURTISS, Director

ANIMAL HUSBANDRY SECTION
DAIRY HUSBANDRY



Dhananjayrao Gadgil Library



GIPE-PUNE-047315

AMES, IOWA

SUMMARY

1. Dairy cows, watered by means of water bowls, drank approximately 18 percent more water and yielded 3.5 percent more milk and 10.7 percent more butterfat than cows that were watered twice per day at an outside tank.

2. Cows watered with water bowls drank an average of about 10 times in each 24 hours. Approximately two-thirds of the water was consumed in the daytime, that is between 5 a. m. and 5 p. m., and the other one-third at night.

3. Cows watered at the outside tank frequently drank but once per day. This occurred about 30 percent of the times the cows were offered water. This refusal to drink more than once per day was distributed among all of the cows, although certain cows showed a greater disposition to drink but once per day than did others. The inclination to drink but once per day was not consistently correlated with the quantity of milk yielded.

4. One unusual observation was that when the cows were watered with water bowls, they usually yielded not only more milk but milk containing a higher percentage of butterfat. A mathematical treatment of the data shows that the probability is only about 4 in 100 that a result as large and consistent could have come by chance alone.

5. The temperature of the water apparently did not influence the water consumption as greatly as did atmospheric temperature. The relative consumption of water increased as temperature rose.

11:57
62
47315