Tests on Loss Reduction in Sliced Beet Pulp

H. R. GUILBERT'

CALIFORNIA data show dry-matter losses of about 40 percent in wet pulp stored in open silos. R. D. Jones of the Spreckels Company found that 2.5 to 7.5 percent of molasses added to pulp in small pits reduced this loss from about 50 percent to 25 percent. The molasses-treated pulp was slightly higher in digestible nutrients and the enhanced feeding value was confirmed by lamb-fattening trials.

In laboratory fermentation tests, the addition of urea and of molasses tended to increase the proportions of volatile acid. Four percent of molasses inhibited acid formation.

Tests were made on preservation of pressed pulp in barrels. Addition of 1 percent molasses and 0.13 percent urea resulted in a sloppy product—40 to 50 percent liquid that would be lost by drainage. Addition of 10 to 14 percent rolled barley reduced moisture to about 80 percent, resulted in an excellent feed with little objectionable odor, and no drainage loss. If moldy material were removed from the top the total loss was 6.0 percent.

In cooperation with the Fontana Ranch Company a test was made with 100 tons of pressed pulp mixed with 10 tons of ground barley placed in a corner of their open reservoir. The settled mass was about 3 feet deep. Surface exposure was excessive and it was exposed to winter rain. The loss was over 50 percent but the remaining feed was excellent. This experience in contrast to the result from the covered barrels suggests that rain leached out acid and favored continued fermentation, liquefaction and drainage.

¹Professor of Animal Husbandry and Animal Husbandman, California Agricultural Experiment Station, Davis, California