

NUTRITION

Snails Useful Feed

► THE GIANT African snail, a major agricultural pest in warm parts of the world, could become useful.

Two investigations, one near completion and the other just starting, are under way to determine how to get rid of the giant snail, *Achatina fulica*.

Recently, University of Arizona zoologists, Drs. Albert Mead and Arthur Kemmerer, began a study of the protein value of the giant snail, with the idea of using it as an enricher of livestock food when dehydrated and reduced to a powder.

A single one of these giant snails was found to contain about two times as much of two essential amino acids as there is in a whole hen's egg, the scientists said. Since standard vegetable-derived animal feeds, such as cottonseed meal, are limited in protein content, Drs. Mead and Kemmerer be-

lieve the addition of snail meal might make a superior animal feed.

Dr. Yoshio Kondo of the Bishop Museum in Honolulu has been observing the effects on the African-snail population of the introduction of cannibal snails (*Gonaxis*) to Agiguan, one of a chain of highly snail-infested islands in the South Pacific. Dr. Kondo found that although 300 *Gonaxis* snails introduced in 1950 have multiplied to 25,000, they exert small control thus far over the giant snail numbers. Rats and crabs do a much better job of eating the giant snails, Dr. Kondo observed.

The *Achatina* snails came originally to certain of the Pacific islands from Africa. During World War II, the Japanese imported the snails to other isolated Pacific islands to feed their soldiers.

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like the germs that make milk sour. Several kinds of antibiotics, including one called thiolutin, are effective in stopping this contamination in beer.

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CHEMISTRY

Chemical Fed to Cows Keeps Milk Sweet Longer

► MILK CAN be kept sweet by treating the cow with a bacteriostatic chemical.

Drs. G. G. Kelley and Karl Dittmer of Florida State University told the meeting of the American Chemical Society in Chicago that the chemical menadione, a methyl derivative of naphthoquinone, will preserve unpasteurized milk when added in small amount. But when 25 milligrams of the chemical per day is fed to the cows, the milk those cows give is also protected from souring for a period of time 20% longer than the milk from untreated cows.

Menadione is a precursor of vitamin K.

Science News Letter, September 26, 1953

CHEMISTRY

Antibiotics Better Whisky

► ANTIBIOTICS, IN addition to their remarkable curative properties for man and beast, are even capable of improving whisky.

The improvement comes in suppressing in the fermenting mash those side reactions produced by germs of the kind that sour milk. These germs reduce the amount of alcohol produced, and may affect the taste of the whisky. Antibiotics will kill off these lactic acid-forming germs, but the manufacturer must be sure that they do not at the same time kill the yeast organisms which are necessary to make the whisky.

A number of antibiotic preparations were tried out, in researches reported to the American Chemical Society in Chicago by Dr. W. H. Day, on behalf of a group in the research department of Hiram Walker & Sons, including Dr. W. C. Serjak, now with Hughes Aircraft Co., and Drs. J. R. Stratton and L. Stone of Peoria, Ill. The antibiotics which were successful in limit-

ing the growth of lactic acid bacteria without stopping yeast growth were tyrothricin, terramycin, aureomycin, chloromycetin and penicillin.

Beer also may have its troubles relieved by the new wonder drugs. Dr. Fred B. Strandkov of the F. & M. Schaefer Brewing Co., told the chemists that three types of bacteria that grow in finished beer create a problem for the brewer.

Colonies of them are known as "second-ary yeast," although actually they are more

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