

berry plant in producing new races of stem rust but they do have a 12-months growing season which adds to their troubles. If some of the selections of Kenya Colony can be of benefit in our own breeding program why may not some of our own breeding benefit those wheat growers in far off Africa in aiding with their rust troubles?

The answer to this question is that perhaps we can. Only a few days ago a request came from the Director of Agriculture, C. C. Webster, of the experiment station at Nairobi that there be sent to their senior breeder, mentioned above, small samples of our hybrids mentioned in the annual report of this station, Bulletin 365, for them to use in breeding for resistance to leaf rust. It is a pleasure to comply with this request and already these have gone forward. It may be one or more of these selections, used as a parent, will later result in the production of a better wheat variety in a distant part of the world.

FOOD CONCENTRATES

Proteins, pre-digested to form the amino acids which the human body must get in its food, may now be given by needle injections at a moderate cost to sick persons unable to eat.

Nutrients thus shot into the bloodstream are processed to correspond exactly to food taken by mouth and are ready immediately to begin the task of nourishing and repairing the body.

Needle feeding has been known for some time, and has been used with success but the cost has been prohibitive. It is used where persons are near death from starvation, or some disease that may prevent eating.

A simple method of mass-producing amino acids, eight of which are required by the body, has been announced by Dr. Jesse P. Greenstein, biochemist of the National Cancer Institute. The method, he told the American Chemical Society at Atlantic City, produces the acids in a safe, pure form that won't cause bad reaction or shock. It can make them by the pounds, instead of fractions of ounces as by present methods.

One of these food concentrates, methionine, which has been selling at \$6.50 a gram (1/28th of an ounce), will be produced for 30 cents a gram. A human needs several grams a day.

Research will also benefit, Dr. Greenstein said. The different amino acids can be tested for their effect on growth, and to learn how much each one is needed in health and in sickness. They may also aid in chemical studies of cancer.

The chemical society also was told at Atlantic City that a red dye, formed during the growth of a giant bacteria, offers hope of controlling desert fever, a highly infectious fungus disease, which resembles tuberculosis and is widespread in the Southwest.

The red dye checked the spread of the disease in rabbits, and trials at Birmingham Veterans Administration Hospital, Van Nuys, Calif., have indicated it will clear up infections in the human body although the extent of its effectiveness has not been determined. (JB)

MORE ARTIFICIALLY BRED COWS

More than four million dairy cows in nearly half a million U. S. herds now are in artificial breeding associations, and one cow out of six in the U. S. will probably be bred artificially in 1951. For statistical details on the associations, herds, bulls and cows, state by state and U. S. totals, write T. Swann Harding, office of information, Department of Agriculture, Washington 25, D. C.