

already active program and there is an understanding of the needs for the introduction by our specialists at Beltsville at the time the material is received."

In other words, a good idea of the dream plant needed is already in mind. These introductions can help make it come true.

Scientists try to improve plants by making them more resistant to pests and diseases, more adaptable to conditions of growth, and also improve the taste, color and table quality of the plants.

Constant Work Needed

This side of the new crop program requires constant work, to breed, with the help of introductions, new crops from the old.

Time and again breeders have turned to wild introductions which are primitive in comparison to modern varieties as a source of much needed genes. The spinach industry has thrived only because breeders were able to find resistance in wild introductions of spinach from the Middle East each time new races of downy mildew and other leaf diseases developed on supposedly resistant varieties.

The work is a slow process and one of the problems is to keep the seed material available over a long period. It is not at all unlikely that a future generation of scientists will sorely need the source seed used by today's plant breeder.

A great seed storage laboratory at Fort Collins, Colo., is in use by the U.S. Department of Agriculture to alleviate this diffi-

culty. Valuable species resulting from more than 60 years of plant exploration are kept under controlled temperatures and humidity. Nine rooms can store 300,000 quarts of seeds.

Under these conditions the seeds will keep their growing ability for a long time, but means are provided for the planting and redevelopment of seed, so viable seed is always available.

This makes a germ plasm bank for tomorrow's plant workers. The seed is available free to qualified research workers for breeding studies, when all other sources fail.

When Nikita Khrushchev was in the United States, he saw the results of years of highly scientific plant breeding which resulted in the hybrid corn crop in the United States.

Khrushchev Liked U.S. Corn

He admired the corn and probably for good reason. The Soviet problem is quite different, for they need all the food they can produce. One factor in high U.S. production is good plants and seeds. So his admiration of the full, large ears of corn was most likely genuine.

Only a fraction of the world's plant kingdom has been used by man. This includes main food, animal feed, textile and industrial fiber, and specialty crops, including ornamentals and drugs. The search goes on, and the United States can have much of what it wants in the way of new crops.

• Science News Letter, 81:218 April 7, 1962

SPACE

The Life of Space Mice

► SALLY, AMY AND MOE, the inseparable team of U.S. Air Force moustonauts that 17 months ago blazed a trail in space—for men and monkeys—in the nose cone of the mighty Atlas, have broken up. Amy, alas, is no more.

The little black space pioneer died last November, more than a year after she and her colleagues made their record-breaking flight. A hernia caused by her high-living habits on earth rather than high-flying in space was blamed.

Amy enjoyed taking high jumps in the little luxury-type mouse enclosure in which she was housed at the Air Force's School of Aerospace Medicine, Brooks Air Force Base, Tex., Dr. Hans G. Clamman, chief of the department of Space Medicine, told SCIENCE SERVICE.

The three space mice had 26 minutes of weightlessness in the Atlas nose cone and had gone as high as 600 miles during a 4,400-mile trajectory that carried them from Cape Canaveral to Ascension Island.

During their ride, while in a weightless state, all three moustonauts dined comfortably from special plastic feeding tubes on oatmeal, gelatin and roasted peanuts mixed with water into a paste.

A tiny radio transmitter carried on Sally's back telemetered physiological responses back to earth that indicated that the mice had no difficulty adjusting to weightlessness.

In fact, judging from their condition and responses when they were recovered, they

must have enjoyed the experience, particularly Amy. All the mice were frisky and friendly, but Amy displayed greater friskiness.

However, her frequent high jumps on earth are believed to have aggravated an inherited tissue weakness that is not uncommon in mice as well as in men. A surgical attempt to correct the condition in Amy was successful, but she hemorrhaged, possible as a consequence of a slipped suture.

Besides Sally and Moe, Amy is survived by more than a dozen children and grandchildren, all vigorous and healthy. Both Amy and Sally were mated with Moe when they returned from space. No abnormal births resulted.

Sally and Moe, now both 20 months old, the equivalent of 60 years of human age, still are active. Moe's dark hair has grayed, but not from radiation, Dr. Clamman said. Sally is still an attractive little brunette, appearing much younger than her advancing months.

Dr. Clamman predicts both may live beyond the normal two-year life span. Upon their peaceful demise, taxidermy may preserve Sally and Moe for posterity.

While there are no announced plans for their offspring, rumor has it that they may be groomed for lunar flight. Who better than a moustonaut could settle for all time whether the moon is made of green cheese?

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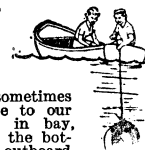


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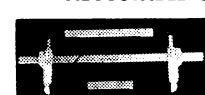
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