

AGRICULTURE

Thanks Given To Corn

Thanksgiving menus traditionally include corn, the widely traveled grass plant that originated in the Americas and ranks as the most important U.S. crop—By Barbara Tufty

► **THANKSGIVING FEASTS** this year will traditionally include one of America's greatest gifts to the world: the nutritious and widely traveled grass plant, called maize or corn.

Simmering in a fragrant white sauce, mashed into a pudding, stacked high in gleaming yellow corn cobs, or served in hundreds of other different ways, this endowment of the American Indian to the modern world has become one of America's traditional foods for Thanksgiving tables.

Now the most important crop in the United States, corn is also grown in large quantities in other countries of the world such as Brazil, Argentina, Mexico, China, Manchuria, India, Europe, Australia, New Zealand, South Africa and behind the Iron Curtain.

So ingrained has this crop become in other countries that many people forget it originated in the Americas.

The true origin of this basic food is somewhat of an enigma, as scientists cannot find any wild plant that is the unquestioned original ancestor. Its nearest relation is the wild perennial grass called *Tripsacum*, which grows in the southern United States and parts of Latin America.

Many scientists believe that corn originated in the Peru-Bolivia area of South America, where the greatest number of corn varieties have been found. In a dry cave in west-

central New Mexico archaeologists have uncovered about 38,000 corncobs, some entire and still bearing grains, dating back to about 2500 B.C. Ancient samples of corn pollen, taken from drill holes 200 feet below Mexico City, have been dated about 60,000 years old.

By the time the European explorers landed on the North American continent, the Indians were cultivating corn and eating it in many ways—corn bread, roasting ears, popped corn, stewed corn, corn pudding, grits and hominy, hulled corn and johnny-cake. Corn flakes were a later invention. This grain played a leading role in America's early history, saving lives of famished settlers at Jamestown and Plymouth, and supplying immigrants as they crossed the Alleghenies and trekked farther West.

Another enigma that corn presents to scientists is its inability to grow wild. Corn differs from all other cereals because it has no mechanism for dispersing its seeds and hence reproducing itself. The seeds, stacked in rows along the cob, are always surrounded by husks which must be removed by an outside force before the grains can reach soil and start to grow.

Now domesticated and utterly dependent on man for survival, corn would probably disappear from the earth without human care.

From years of research on inbreeding and

crossing strains, scientists have developed desirable traits such as resistance to drought and disease and ability to meet many different climate conditions. These new breeds have aided farmers everywhere to grow more and better corn on less land, and have made corn one of the best travelers in the world.

Although corn is an important item in the human diet, only a tiny part of the world's vast crop is eaten directly by man. Most of it—about 85% in the United States, for instance—is fed to animals and comes to the table in the form of meat, dairy products, poultry and eggs. Corn is also in increased demand in industry to produce cellulose products, chemicals, oils, plastics and abrasives.

This vigorous plant, with its silken tassels, sturdy roots and golden grain that has benefited America and the world has been seriously suggested as the national flower emblem for the United States.

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Communist China Grows More Cotton This Year

► **THE 1964 COTTON** crop in Communist China may be 23% higher than that of last year, the U.S. Department of Agriculture estimated.

With better than normal farming weather, mainland China may produce about 5.7 million bales this year, compared to 4.7 million bales last year.

At the time of sowing, the moisture conditions were good, a report in *Foreign Agriculture*, a publication of the U.S. Department of Agriculture Foreign Agricultural Service, stated. There were no reports of drought during the growing season.

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For New Bug Control: Plant an Alfalfa Home

► **GIVE THE BUGS** a snug home so they will not roam. This is the new policy advocated by agricultural researchers at the University of California at Riverside.

By planting strips of healthy green alfalfa next to strips of cotton or other field crops, scientists have found that the destructive lygus bugs will choose to remain in the alfalfa, where they cause little damage and leave the valuable cotton plants alone.

In the experiments, California scientists scooped up about three million bugs with a 25-foot wide, self-powered vacuum sweeper made from a converted spray rig. The bugs were squirted with fluorescent dust which shows up bright orange under ultraviolet light and released in the alfalfa strips.

Two or three days later, the scientists inspected the cotton fields adjoining the alfalfa and found almost no bright orange dusted bugs in the cotton. This seemed to indicate that the lygus bugs preferred their alfalfa home.

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Bakersfield Californian

MONSTER VACUUM—The 25-foot-wide vacuum on this converted spray rig scoops up a million lygus bugs a day from an alfalfa field. Chuck Bartok pilots the rig in a field near Bakersfield, Calif., as part of a study by Dr. Vernon Stern, University of California, Riverside, on ways to avoid damage to cotton and other crops caused by the lygus bug.