



Seeking an Ancestor

CORN'S wild ancestor has never been found. Perhaps the plant is extinct, perhaps it still lurks in some unexplored mountain valley in Central or South America, or on the inaccessible lowlands on "the wrong side of the Andes." Just the off chance that the wild form of this most important of the world's food plants may yet be found is sufficient spur to drive explorers—and to stimulate armchair speculation.

If you were looking for corn's surviving ancestor, where would you do your searching? A hint may be found in the kind of terrain now demanded by the corn crop. Corn insists upon the cleanest kind of cultivation, which means soil kept constantly stirred and loose. Giant though it is among plants, it cannot successfully compete with crowding weeds or contend with hard, packed soil.

Where in nature will you find the nearest approximation to the soil of a well-cultivated cornfield? Clean, freshly exposed soil surfaces are found primarily in two kinds of locations: on newly eroded surfaces, such as are provided by landslips and caving gullies, and on thick deposits of silt left by receding floods, smothering down the previously existing vegetation.

Flood-deposited mud seems a bit too dense and heavy for corn, although we must keep in mind the likelihood that our hypothetical ancestor-plant, like the wild ancestors of practically all domesticated plants and animals, will be considerably tougher and more adaptable than its specialized, "soft" descendant.

Scars left by mountain landslides are not much more promising than river-bottom muds. The soil there is apt to be either rough gravel or raw clay, inhospitable to any kind of plant life.

The loose, moist, but well-aerated soil left by the caving sides of gullies in alluvial soil would seem to be the nearest natural approximation to the artificial conditions of a modern cornfield. Perhaps such spots would offer the best chances for finding possible survivors of the original wild-type *Zea mais*.

Science News Letter, June 24, 1939

MEDICINE

24-Hour Recoveries Result From Synthesized Vitamin

DRAMATIC, 24-hour recoveries of human patients after treatment with the newly-synthesized pure vitamin B₆ are announced by Drs. Tom D. Spies, William B. Bean and William F. Ashe, of Birmingham, Ala. (*Journal, American Medical Association, June 10*)

This is the first time, it is believed, that human use or need for this part of the vitamin B group has been reported. Rats, it was known, needed the vitamin to prevent skin disease. Synthesis of the vitamin was reported just a short time ago (April 14) by Drs. Stanton A. Harris and Karl Folkers of Merck and Company's Research Laboratory.

Four persons who had been treated for pellagra and beriberi, due to lack of two other B vitamins, developed symptoms again when they went back to their old inadequate diets. A small amount of pure synthetic vitamin B₆ was given them. Both doctors and patients were astounded when within 24 hours all their symptoms had disappeared.

One man had been able to walk only a few steps when given an injection of vitamin B₆. The following day he walked two miles without fatigue.

Vitamin B₆ is one of the water-soluble compounds of the vitamin B complex and is a component of yeast and liver extract.

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METEOROLOGY

Superb Lightning Picture Snapped in Yellowstone

See Front Cover

IT MAY BE at least minor treason to mention it, but it isn't always fair weather in America's No. 1 vacation spots, the national parks. However, even storms may add to the beauty and grandeur which we go out into the wilderness to see, as witness the superb lightning display caught in the Yellowstone by the camera of J. E. Haynes and shown on the front cover of this week's SCIENCE NEWS LETTER.

Science News Letter, June 24, 1939

MEDICINE

Vaccine to Guard Men From Horse "Sleeping Sickness"

AVACCINE is now ready to protect humans against horse "sleeping sickness" if there is an outbreak this summer as there was last year. Development of the vaccine is announced to fellow scientists by Dr. Ralph W. G. Wyckoff, of the Lederle Laboratories at Pearl River, N. Y., (*Science, June 9*).

Vaccines that protect horses against both eastern and western types of this serious plague have previously been developed, but medical and health authorities did not consider these suitable for human use. Dr. Wyckoff's vaccine has been prepared in a somewhat different way from that used for making horse vaccines.

It has been effective in protecting laboratory animals and should, Dr. Wyckoff says, "be more suitable for any human use that may in the future be needed."

Reported cases in the outbreak of the horse plague among humans in Massachusetts last summer totaled 38. A few cases were also reported in the West.

Science News Letter, June 24, 1939

ELECTRON OPTICS

Compiled by

Otto Klemperer

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