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G. Valentine

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HISTORY OF THE POTATO

by

George H. Valentine,
Assistant Agronomy Specialist
Extension Service.



Map of Western Hemisphere
showing
where potatoes originated.

A. The Native Home of the Potato.

The white potato is a native of the high mountain valleys of Chile, Peru, Mexico and southern Colorado. The accompanying map shows the approximate location of these birth places.

The soil in these valleys is in each case a loose, fertile loam, well drained, easily worked and well aerated.

The climate of these sections is very favorable to the growth of potatoes. The days in these sections are long with plenty of hot sunshine and cool nights. In such a climate the potato is remarkably free from disease because the sun is the best fungicide¹¹ and the cool nights check the growth of diseases. The summer rainfall is light compared with the total rainfall for the year and the potatoes mature in a comparatively dry soil. The growing season is from 100 to 110 days, the vines being killed by frost until late spring.

Although these regions mentioned are the ideal conditions of soil and climate for potatoes, they are grown successfully in almost all parts of the temperate zone.

From Peru, Chile, and Mexico where the early explorers found the natives cultivating the potato as early as 1500 A. D., it was carried to southern Europe. It gradually spread to the north of Europe. It was carried to England from Europe and by returning explorers from America. At about the same time it was taken to the early settlements in what is now Florida and the Carolinas. As settlements were made farther north the potato was taken along, chiefly to Virginia and Maryland. At the present time the potato is raised in nearly every state in the Union.

B. The Potato Family of Plants.

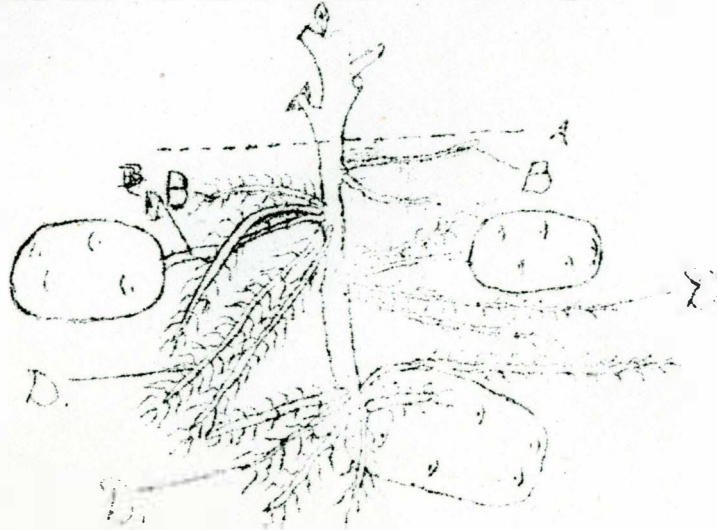
The potato plant belongs to a large plant family. The name of this family is the solanum, or night shade family containing some 1600 different kinds of plants, only six of which produce tubers like the potato. The family is composed of powerful narcotics¹¹ such as tobacco, belladonna, from which the family gets its name, "solanum", meaning soothing or quieting; and of edible plants¹¹ such as the tomato and egg plant. Some of these plants are important as medicine or drugs, some only as weeds.

C. The Parts of a Potato Plant.

The potato is a perennial¹¹ plant, that is, lives several years unless damaged by frost, flood or other agents springing up each year from its underground stems, the tubers. The plant grows from 1 to 3 feet high, the stems are weak and watery, smooth and usually solid and somewhat angular. When very tall the plants usually fall, spreading over the ground.

(¹¹ -- See Glossary for definition)

The leaves are dark green in color and divided into several lobes[#]. The flowers are one-half to one inch across varying in color from white to purple. The flowers sometimes produce fruited seed pods similar to those of the ground cherry. In the wild state the potato usually produces seed, but the cultivated forms seldom do. Many varieties never produce seed because



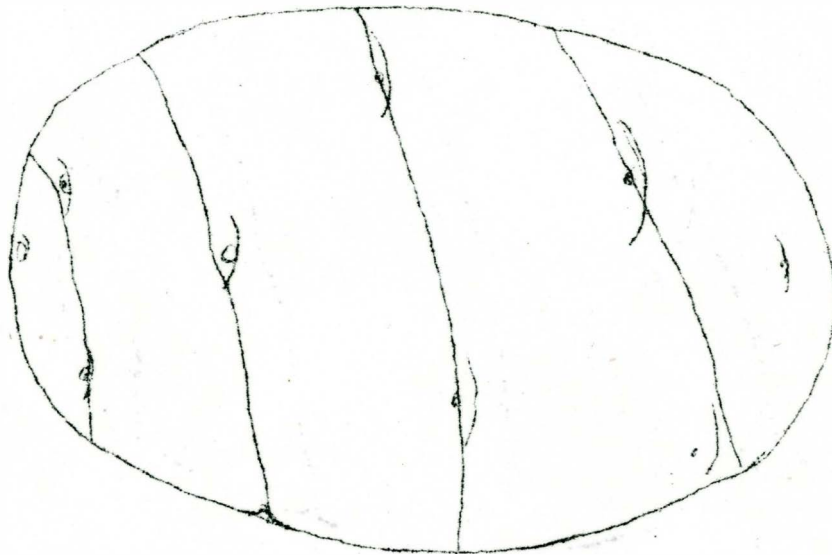
(Typical root and tuber system of potato showing (B) tuber bearing stems and (D) the roots.)

of their disagreeable taste are seldom eaten by any animals except cattle.

The tuber is an enlarged underground stem and not an enlarged root as many people think. These underground stems are branches of the main stem which varies in length according to the depth of planting. Roots may start from this main stem at any point, chiefly at the place where the lateral tuber branches start. No roots are produced on the tuber branches. The tubers are formed by the enlarging of the ends of these branches. The eyes of the tuber are the buds from which new plants grow, and roots to support this plant grow from the base of the new shoots, not from the tuber itself. By examining the potato it will be seen that the eyes or buds are arranged in spirals like the leaves on the stem above ground. If the tuber could be stretched out and the eyes made to grow it would appear much the same as the stem above ground.

([#] -- See Glossary for definition)

(Diagram showing spiral location of eyes
on the potato tuber.)



This shows that the tuber is not a root since it neither looks nor functions like one. Each bud or eye will produce one or more plants so even a single tuber may produce a very large yield.

Summary:

The potato is a native of Chile, Peru, Mexico and Colorado.

The potato belongs to the family solanum.

The parts of the potato plant include the stem, leaves, flowers, tubers, tuber branches, and roots.

Glossary:

Edible Plant:

Any plant fit to be eaten as food.

Fungicide:

Any substance that destroys fungi.

Lobes:

(Botany) Any rounded division or projection of an organ especially of a leaf.

Narcotic:

A drug which in moderate doses relieves pain, and produces profound sleep, but which in poisonous doses produces stupor, coma or convulsions.

Perennial:

(Botany) Continual more than two years.

Pollen:

(Botany) The mass of small spores in seed plants.