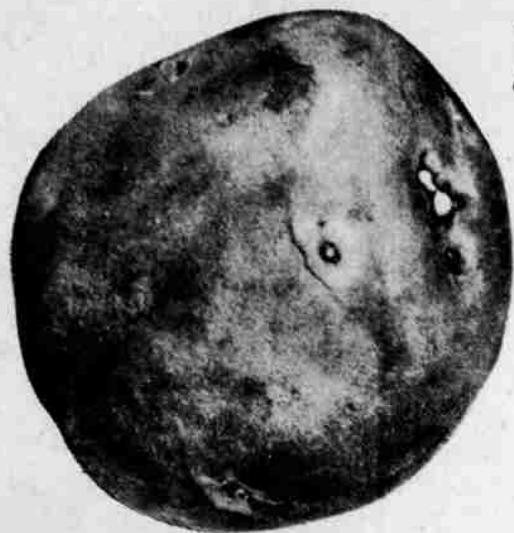


Uncle Sam Breeds A YELLOW "WHITE" POTATO

To Help You Grow



The new cream-yellow potato developed by Dr. C. F. Clark of the U. S. Department of Agriculture.

By MARJORIE VAN DE WATER

SOON you may have a new and appropriate delicacy for your dinner table on St. Patrick's Day—our old friend the Irish potato in up-to-the-minute 1933 style with a creamy yellow color, new delicate flavor, and the addition of that present day requirement, the growth-promoting vitamin A.

This colorful addition to tomorrow's menu is also a symbol of today's agricultural progress.

For the farmer's problem is no longer the question of how to produce enough food to fill the hungry mouths of a growing population. Today there is plenty—perhaps more than plenty.

The progressive agriculturist now is anxious to improve the quality, rather than to increase the quantity, of his products, and to develop new crops suited more closely to the needs and tastes of the consumer.

This new yellow potato was bred by scientists of the U. S. Department of Agriculture as one answer to this demand. To Dr. C. F. Clark, of the Bureau of Plant Industry, belongs particular credit for the achievement.

THE yellow potato is not a sweet potato. It is just as "Irish" as the "Murphy," although neither one came originally from the Emerald Isle. Their first home was on the terraced farms of Peru and Bolivia.

The name "Irish potato" is indeed wrong on two counts. This vegetable is not the "Batatas" of Virginia. That name belongs properly to the sweet potato. It is, correctly speaking, the "papas" of the Peruvian Indians. And neither, of course, is it Irish except by adoption.

The confusion of both names and plants was first made by botanists of the time of the early explorers who knew little of either vegetable except from hearsay.

John Gerard, who published his famous *Herbal* in 1597, wrote one of the first scientific descriptions of the potato. He called it erroneously "Potatoes of Virginia—*Battata Virginiana*," although his illustrations were drawings, not of the Virginia sweet potato, but of the round white potato.

He claimed to have received one of the tubers from Virginia, and was so proud of it that he had his portrait appearing in the book holding in his hand a blossoming potato vine.

Gerard's description of the use of the potato is interesting to those who know them only as boiled with butter or "French fried." He suggested that:

"Of these roots may be made conserves no lesse toothsome, wholesome, and daintie, than of the flesh of Quinces. . . ."

THESE roots may serve as a ground or foundation, whereon the cunning confectioner or Sugar baker may worke and frame many comfortable delicate conserves, and restorative sweete meates.

"They are used to be eaten roasted in the ashes; some when they be so roasted, intuse them, and sop them in wine; and others, to give them the greater grace in eating, do boile them with prunes, and so eate them.

"And likewise others dresse them (being first roasted) with oile, vinegar and salt, every

Speaking of St. Patrick's Day, it will soon be possible to get the familiar Irish spud in a new color scheme and with the additional virtue of the important Vitamin A



An old drawing showing Sir Walter Raleigh directing the first planting of potatoes in Ireland . . . a legend, incidentally, which has no basis in fact.



What the original yellow potato of Peru looked like before the U. S. Department of Agriculture got to work on it.

man—according to his own taste and liking; notwithstanding howsoever they be dressed, they comfort, nourish, and strengthen the bodie."

This confusion of two American plants by Gerard was probably the basis for two similar legends to the effect that Sir Walter Raleigh, or Sir Francis Drake, took the white potato from Virginia and planted it in Ireland.

No one knows just when the potato was really introduced into Europe or by whom, but it was probably taken over there by Spanish explorers who learned from the Indians of Peru of its value as a food.

ONE Pedro de Cieza de Leon wrote in his journal in 1538 or thereabouts of the papas, which he said was "a kind of groundnut, which when boiled becomes as soft as a cooked chestnut, but which has no thicker skin than a truffle."

Cieza told also of how the natives dried the papas in the sun. These dried potatoes, which they called chuno, would keep all the year round. The Indians of Peru prepare their chuno, or chunyo, in much the same manner today.

It was in 1719, more than a century after Sir Walter Raleigh made his voyage on which the old myth said he discovered the potato, that that vegetable actually earned the right to be called "Irish." Then some Scotch-Irish colonists settled in New England, bringing with them potatoes for planting. A previous importation from England by way of Bermuda was, how-

ever, made in 1621 or 1622.

But the potatoes of Peru were not all white, although until recently only the white variety has been planted and cultivated and developed into a marketable product in Europe and America.

The natives of Peru enjoy potatoes of many shades—white, pink, red, yellow, and even deep shades of purple which are almost black.

THE particular favorite there is the yellow potato, which they also call the egg potato and the butter potato because of its rich golden color and soft butter-like texture. It will not grow in the irrigated gardens of the lowlands, but is found on terraced farms high up on the slopes of the mountains—way up almost to the snow line.

For this reason, and because the plants refuse to produce many tubers to the vine, it sells down in the cities at a very high price, and is considered a great luxury. Unfortunately, from the point of view of North American tastes, this potato has very deep-set eyes with prominent "eyebrows," making peeling a wasteful operation.

This yellow potato, so prized in Peru, has appealed to all plant explorers who have visited that home of all potatoes. It has been planted in the United States many times but without commercial success because of its low yield under North American conditions, and its deep eyes, and susceptibility to many diseases.

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The terraced farms of the ancient Peruvians, where the first potatoes were raised. . . . This photograph, obtained by the Bureau of Plant Industry, U. S. Department of Agriculture, shows the hill terraces above Pisac, Peru.

IT was not a market favorite. Housewives compared it, not with the white potato which the Spanish explorers found years ago, but with the product of centuries of cultivation and selective breeding from that gnarly, rough little tuber.

A new chapter in the history of the yellow potato was opened in 1899, when a young man named David Fairchild was lucky enough to be taken for a trip around the world as assistant to that patron saint of plant introduction, Barbour Lathrop. They found in Peru the yellow potato, and brought it back to the United States for the United States Department of Agriculture.

It so happened that this was the first Peruvian potato importation recorded by the Division of Foreign Plant Introduction of the U. S. Department of Agriculture. In fact it was one of the early introductions after that division became an organized unit, for the office was then less than a year old. The men in that office quickly became interested in it, although it seemed to have no commercial future.

Since then, the yellow potato has been brought and sent to the Department of Agriculture by many different persons. Dr. Wilson Popenoe was another great plant explorer who saw promise in this bright-colored vegetable. Consuls representing the United States in various parts of South America have sent samples of it home as a curiosity or as an interesting possibility for northern farmers.

But lately, a discovery by chemists gave to

yellow is hidden by the green of the chlorophyll.

Do yellow potatoes contain vitamin A, nutrition experts asked themselves. The answer was soon found. They do contain vitamin A, and this gives them a distinct advantage over the familiar white spuds.

THE advantage is so large that when this discovery was made, scientists of the Department of Agriculture felt well rewarded for the efforts they had made to breed an entirely new potato, made to order for the American market and the American dinner table taste.

First it was necessary to change the rough gnarly skin into one smooth and perfect. The delicious flavor must be retained or improved. The yield must be increased. Cooking and keeping qualities must not be overlooked. Finally, the yellow color which was found to accompany the precious vitamin must not be sacrificed.

A task for a magician, you will say. But it was all in the day's work, or, more accurately, several years' work, for Dr. Clark. He has produced a yellow hybrid which should prove a success in the market as soon as it has been introduced on a commercial scale.

It has already been tried out under actual farming conditions on the Aroostook Farm of the Maine Agricultural Experiment Station at Presque Isle, Me. There it gave a yield of over 500 bushels to the acre, well above the average for favorite varieties being grown now.

It was found to be hardy in that potato-growing climate, and to be reasonably disease-resistant.

IT will be a number of years, however, before all the tests to which a new variety of potato is subjected can be made. If it survives all these tests it will require further time to increase the stock so that it can be produced in quantity by growers.

The next step was to find what the consumer would think of the new variety. After all, the proof of potatoes as well as puddings is in the eating.

Samples were therefore turned over to the Department's Bureau of Home Economics for a test of cooking qualities and of palatability.

"Very good!" was the verdict of these experts.

A steaming mound of these potatoes mashed is a very inviting addition to the dinner table

as well as a colorful ornament. And in salads they add a new note of pleasing color. They stand up under the baking test that housewives know is the strictest criterion for the good potato.

As for taste—if you like potatoes, you will like these. For the new hybrid does not taste like its Peruvian ancestor, but like the ordinary white potato with which all are familiar.



A prehistoric funeral urn from a Peruvian grave (left) showing how closely it was modeled after the yellow potato at the right.

the yellow potato a new value in addition to its excellent flavor.

A yellow color in vegetables and other food products denotes the presence of vitamin A, the vitamin of growth, and preventive of a certain type of eye disease. Thus carrots, yellow corn, eggs, squash, turnips contain vitamin A, as do also many vegetables such as spinach where the