

TALINUM, A SUMMER VEGETABLE FOR FLORIDA

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In the summer of 1923 a small packet of tiny black seeds arrived from Mr. P. J. Wester, then connected with the Bureau of Agriculture of the Philippine Islands. These were the seeds of *Talinum triangulare* and Wester described them as a new vegetable which had recently been introduced into Manila from Java. He said that the fleshy tender leaves were boiled like spinach and served with meats. I recall seeing a few plants which Simmonds grew from those seeds in the Plant Introduction Garden at Chapman Field, then a bare and dreary place which had been left by the War Department as a useless waste from the last war. Its pretty pink flowers and dark green succulent leaves gave it a promising look but I did not try it then.

The following year I went to Panama and later joined my friend Allison Armour on the coast of Sweden where he was remodeling the Yacht Utowana for the cruises which are described in "Exploring for Plants."

I next saw this plant in a charming terraced garden overlooking a river in Ceylon where two little girls were picking the flowers of the *Agati grandiflora* which also is a favorite vegetable in that island. I learned it was there used as a vegetable but where it had come from I did not find out. This was in 1926.

When the "Utowana" reached the Gold Coast of West Africa the next year and we made a collecting trip by truck through the native villages, I found myself one morning standing in a field of this plant facing two tall rather forbidding looking native chiefs dressed in Javanese sarongs. I could not be sure of what these chiefs said about the *Talinum* but I gathered they considered it something of a weed there.

It certainly was scattered everywhere about. I thought then that it was probably a native of West Africa.

Returning from the various cruises in the Utowana to the Kampong I was pleased and a bit surprised to find that the *Talinum* had made a home for itself around some of my citrus trees and that a considerable growth of it invited me to try it out as a vegetable.

Earnest's first attempts to cook it were not highly successful for there was a slippery character about it which reminded us all too vividly of purslane and okra and we decided that some way must be found to reduce the sliminess of the cooked vegetable. So long as there was an abundance of fresh vegetables on the market, Earnest insisted in using spinach in preference to *Talinum* but now and then he would experiment with the inviting luscious green shoots of the *Talinum*; each time seeming to get nearer and nearer to a really palatable dish of greens. He finally evolved a combination of egg and *talinum* which has been a most popular dish and one which we have not hesitated to place before our most fastidious guests. I do not recall a single one who has refused it or who seemed not to relish its delicate texture and flavor, for Earnest has succeeded in getting practically all of the sliminess out of it. I shall give his detailed recipe shortly.

It is now about twenty years since this plant found its way from Manila to South Florida and I have had it growing on the Kampong for ten years and have eaten Earnest's preparation of it many hundreds of times I suppose. I feel that I ought to know something about it but in reality when this winter arrived and with it the threat of a shortage of lettuce from California and

dangers of other vegetable shortages were talked about, I found that I still did not know where the plant had come from originally.

It is in cases like this that one is obliged to turn to the books to discover where a plant has its home and one is grateful at such times that there are men and women with the patience and interest to put down in print all the facts they can gather from a study of the Herbarium specimens gathered all over the world by painstaking plant collectors. The chief interests of these collectors are to get a dried specimen of every kind of plant that grows in the wild attached to a sheet of paper with data as to where and when it was found so that by comparison the facts regarding its distribution over the world can be definitely settled. It is not enough to report that they saw such and such a plant. Evidence such as passes current in a court room will not satisfy a systematic botanist. The thing itself, even if dried, has characters which make it positively determinable. Like fingerprints, somewhat, they establish the identity of species.

Here before me now are all my books that mention *Talinum triangulare* and from them I gather the following: In "The Useful Plants of West Tropical Africa" by J. Hutchison and J. M. Dalziel — Dalziel of the Armour Expedition to West Africa — I find that *Talinum* is a naturalized plant of waste places, grown in gardens and cultivated in the forest regions of the interior where the Fantis tribe has named it "pull-it-up-and-plant-it" because of its being a useful plant. The Ashantis call the Fantis tribe the "Fan ti" which means "spinach eaters" because they eat this plant. It is used in fetish ceremonies, placed in a pot with eggs, etc. To some clans it is a tabu used in purifying ceremonies and it has the reputation when given to fowls of stimulating their egg laying.

But more interesting perhaps than the reports which my friend Dalziel has unearthed about the uses of the *Talinum* is

his remark that "The plant is very easily cultivated from seed or by cuttings, and reproduces itself freely from the seed which is ripe for gathering when the fruit points downwards. The last clause of this sentence illustrates how one can have under ones eyes for years a plant without observing closely its behaviour. I had gathered many of the seeds but had never noticed that so long as the tiny seed pods remain upright their seeds are brown, not ripe; just as soon as they curve downwards however, the seeds turn black and when the pod is touched it explodes and scatters the minute black seeds over the ground.

Profiting by the observation — who knows but an observation of one of the "spinach eater" Fantis — my friend Edgar Brown and I were able to gather perhaps a million or so seeds of the *Talinum* which are at the disposal of those who want to grow this important vegetable. This failure of mine to observe the behaviour of my *Talinum* plants is the more unpardonable in view of several efforts which I made without success to cross this species with a related species, *Talinum paniculatum* which I collected the seeds of in Nassau in 1932.

What might come as a result of cross breeding of the fifteen distinct species, nobody can foretell. One of these is said to occur in Washington State and another in our South Eastern states while 3 are Tropical African and the rest tropical American.

Looking further into the literature at hand I discover that Dr. J. J. Ochse in his monumental work on the "Vegetables of the Dutch East Indies" in which he describes over three hundred vegetables that are used by the Javanese and other races of that vast Archipelago, gives a page of text and an excellent illustration of the plant executed by a Javanese artist. He starts his story of this plant by saying:

"This is a fast growing plant, which was introduced from Surinam into Java in 1915 and which now already occupies a well-deserved place among the vegetables of this

country. This vegetable is mainly used for the European table as a substitute for purslane. As it has proved very fit for this purpose it is planted and sold more and more frequently. The minute shiny black seeds are sown in rows; the rows being 30 c. m. apart. Usually one can begin to harvest six weeks afterwards."

It is perhaps significant that a new Plant Immigrant into a country where there are so many vegetables available — 300 or more — should have made such progress in only 16 years that it had come to "occupy already a well deserved place among the vegetables of the country."

When I compare the spread of the plant in the gardens of Java with its slow progress here in Florida since 1923; where it arrived by way of the Philippines (having almost circled the globe from its home in Surinam) I am led to speculate on the causes of this difference in popularity but find so many explanations that it is impossible to form any sane conclusion. I think I am warranted in asking if there is not something faulty in our technique of "new plant popularizations."

This paper is written with the idea of placing before the Horticulturists of Florida the claims of a new vegetable which grows with great vigor and rapidity throughout the long summer season when spinach refuses to grow here and when imports of California vegetables may be impeded by scarcity of transportation, and can be utilized on our tables to distinct advantage. Wars have brought many changes in the menus of civilized man. Necessity is the mother of inventions in foods as well as in other things.

The directions for planting this vegetable are extremely simple. If only seeds are available these should be sown in rows in a "flat" in humus rich soil and because of their size they will require careful watching when they first appear above the soil, being shaded for the first week or so. When a few inches high the seedlings may be set out into good soil setting them a foot apart

each way in rows. Plenty of water is needed to make them grow rapidly and produce their soft succulent green tops. These tops can be gathered in six weeks from planting out. Side buds will immediately develop and give another crop in a few weeks. The supply of tips for the table will continue indefinitely but after the main shoots become too woody it is best to start a new planting by burying short pieces of the mature stem — cuttings in other words. Once a small planting is established a perpetual supply can be maintained easiest by the use of cuttings. Even pieces only two or three inches long are long enough.

One should make no mistake in thinking that the table will welcome this Talinum regardless of how it is cooked. I have found by long experience that it is easier to grow a fruit or a vegetable than it is to teach people to eat it. There is an instinctive basic objection to almost any new food which is more pronounced with some people than with others and unless a new vegetable for example is prepared in the most attractive way at the very start it is likely to create a prejudice in the mind which almost any number of later attempts will fail to break down. To ridicule any new vegetable seems to be instinctive. A new dish offers the opportunity for an amusing characterization — a caricature if you please — which is generally welcome in the table talk of the home and the person who can invent some amusing comparison gets credit for his witty remark even when it unjustly condemns the new dish — often to complete oblivion so far as the particular family is concerned.

It is because of this well established fact that I must caution those who want to learn to like the Talinum to begin serving it in the best way so far known to those of us who have come to like it very much.

Of the various ways tried by Earnest Sands the following have proved the best. Other methods will doubtless be discovered by other cooks as the use of this new vegetable increases here.

As "spinach". Pluck the leaves from the stems and wash thoroughly then proceed as with spinach. Boil for 15 minutes, adding salt to taste a few minutes before the Talinum is cooked. Then take off the stove and put in a collander and run hot water over the Talinum to wash out as much of the mucilaginous material, "slime" as possible. When this process is done, and it should be carefully done, chop up the leaves and season with butter, salt and pepper and serve. To those who have learned to like okra, who do not object to the mucilaginous characters of the okra pods, Talinum will be found excellent. To the Belgians and Hollanders and other Europeans who use Purslane as a greens Talinum will appeal at once.

As "omelet". Cook the Talinum as described in previous recipe removing as much slime as possible. Then proceed as with an ordinary omelet; break two eggs in bowl, beat well, add 1 cup of milk; salt and pepper to taste and then add the chopped up cooked Talinum leaves. Mix well and put in well greased baking dish and bake for ½ hour and then serve.

I am aware that the fresh leaves are often used, without cooking, in a salad with French dressing, but for some they contain a bit too much of the slime to be agreeable.

No more so than okra however, and consider how okra has come to be grown

throughout the country. It really makes an excellent salad and Mrs. Dorn affirms she uses it in making sandwiches.

What food value has the Talinum? Thinking to get the opinion of the Food Chemists on this matter I sent specimens of the plant to Washington but found I was appealing to an over busy office which referred me to Dr. J. L. Heid of the Citrus Products Station here in Winter Haven. Dr. Heid visited me and took back with him cuttings of Talinum which he planted in the grounds of the Station where they grew well.

I have just received the report which reads as follows:

"The Vitamin C content of the green leaves of this plant growing on the grounds of the U. S. Citrus Products Station was found to be 160 mg. per 100 grams, hence this plant is an excellent source of this vitamin." Signed A. L. Curl, Chemist.

Regarding Curl's analysis Dr. Heid adds in his letter the following significant remark: "The Talinum shows a phenomenally high content of Vitamin C comparing with guavas and sweet peppers. It also probably has a considerable content of carotenoid pigments."

It would be strange indeed if the privations of this war were to bring about the wide circulation of this quick growing summer vegetable. Wars have in the past changed man's diet I believe.