WITLOOF CHICORY.

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Salads are now very popular on American tables as they have long been with European epicures. The crispness and delicacy of a well-made salad, with the novel flavor combinations and gustatory thrills made possible by judicious union of new plant tastes and aromas with the mild acids and rich oils used by expert chefs, have a peculiar appeal to delicate palates, long wearied of heavy meats and vegetables or cloyed by rich desserts and pastries. Consequently, in any of our large cities where surplus wealth accumulates, a ready market exists for any salad plant that pleases at once both eye and palate.

Such a plant is Witloof chicory; and since its culture in New York State is not only possible but practicable and easy it would seem that market gardeners and forcing-house men are missing an opportunity for a nice supplement to their revenues unless they grow it.

Witloof chicory is a Belgian development of the ordinary chicory whose roots are used as a coffee adulterant or coffee substitute and which has been cultivated to some extent in America, running wild in many sections to become a pernicious roadside and pasture weed with striking blue flowers.

The common chicory, or succory, has often been forced in winter to form heads or loose leaves (Barbe de Capuchin) for use in salads or to be cooked for “greens” as are dandelions. But Witloof (White-leaved) chicory is a better forcing plant, with larger roots than the common chicory, and with heavy, broad smooth leaves that make very attractive heads when properly grown. The plant is also known as Brussels chicory, from its supposed place of origin, and, improperly but most commonly in the markets, as “French endive.”

* This is a brief review of Bulletin No. 418 of this Station on Culture and Forcing of Witloof Chicory, by J. W. Wellington. Anyone specially interested in the detailed account of the investigations will be furnished, upon application, with a copy of the complete bulletin. Names of those who so request will be listed to receive future bulletins of the Station, popular or complete edition, as desired.
PLATE I.—Roots of Witloof Chicory for Forcing.
1, "Extra" size,—too large, producing compound heads (Plate II, fig. 2); 2, "Large" size,—very satisfactory; 3, "Small" size, too small.
Plate II.—Witloof Chicory Heads.

1, Heads from roots shown in Plate I; left, too large; center, ideal; right, too small; 2, compound head; 3, forced roots, with crowns and heads.
Witloof chicory makes very attractive salads, white, crisp, faintly bitter but with a characteristic flavor most pleasing to practically all palates. The heads may also be used as a potherb, similar to spinach or dandelions, but are more delicate than either.

Great quantities of Witloof chicory have been grown about the larger cities of Belgium and France and sold for local consumption or sent to Germany, Switzerland, England, and, recently, to the United States. Before the war, Witloof was sold in London markets, undoubtedly with profit, at from 4 to 8 cents a pound. It then brought 25 or 30 cents a pound in New York markets and now, because of restricted growth and transportation difficulties, brings nearly double these prices.

**Growing the plant.**

Realizing these conditions it seemed wise for the Station to ascertain whether Witloof chicory can be grown and forced readily and cheaply in New York State. Both growing the plants and forcing the heads prove to be easy and inexpensive.

The seed, imported for these tests from England but sold by many American seedsmen, is not expensive, and the growth of the plants to form forcing roots is simple. The seed may be sown any time in May in open ground, in rows eighteen inches apart and the plants later thinned to six inches apart in the row. Ordinary garden culture only is needed, but the plants should make a steady luxuriant growth, resembling large, smooth-leaved dandelions. The roots should be lifted just before the ground is liable to freeze, the leaves trimmed to within two inches of the crown, and the roots stored.

**Forcing the heads.**

When needed for forcing,—January 3, in the Station test,—the roots should be placed in beds or boxes where moderate heat can be applied, first cutting them off at the bottom to a uniform length of 8 or 9 inches. For holding the roots any soil or sand will do, since the growth of the heads is from the food stored in the roots and does not depend at all on the soil fertility. The roots may be set quite close together, but not touching, upright in the soil and covered to the crowns. Various materials may be used for holding and bleaching the heads during their growth, but in the Station tests eight inches of clear sand was used with splendid results. This was placed on the bedding material as soon as the roots are set. One or more free applications of water should be made.

From experiments at different temperatures, from 50° to 60° F. would seem to be desirable, the latter probably preferable since growth is slower at the lower temperature. Higher temperature than 60° for any considerable period causes the leaves to shoot up rapidly and decreases the proportion of solid heads.

At these temperatures the leaves should begin to show through the eight inches of sand in about two weeks, when the heads are ready for harvesting.
In the Station tests four grades of roots were used; Extra, averaging 2 inches in diameter, Large, 1.4 inches, Medium, 0.9 inch, and Small, 0.6 inch. Of these the Large and Medium roots gave more than 70 per ct. of marketable heads, while the Extra roots produced too many divided and loose heads, or heads too large to serve satisfactorily as individual portions at table. The small roots produced many small heads, too slender for market purposes. The heads should be from four to six inches long, and weigh two to three ounces to suit the market best. In Europe they are packed in baskets holding 10 kilograms (22 lbs.); but the illustration on the title page shows a filled 3 lb. Climax basket, which makes a very satisfactory package for small American markets.

The heads grown in these experiments were pronounced excellent by local grocers who have handled imported Witloof, and far superior to the foreign product in crispness and delicacy.