

## CULTIVATION OF BROCCOLI AND CAULIFLOWER.



It is customary in gardening books to treat of the Broccoli and the Cauliflower as altogether distinct, and requiring different modes of cultivation. This is a mistake—they are not distinct—they differ in name only; and as to cultivation, whatever rules apply to one, apply with equal force to the other. That we may be clearly understood, we are bound to say that the term “cauliflower” may be conveniently applied to the most perfect white curd-like varieties that are cut during summer and autumn, as they are at once the most handsome and the most delicate-flavoured. But there is no inherent impropriety in regarding broccolis and cauliflowers as members of one class of vegetables, and the well-known Walcheren variety may be instanced in illustration, for this is acknowledged to be either a broccoli or a cauliflower, at the discretion of the cultivator. If it be asked how the supposed distinction originated, it may be answered that the varieties of broccoli differ in degrees of hardiness, and the most tender of them require to be sheltered during winter; and as only such of the finest quality are worth the trouble of protecting, these form a group which it is convenient to separate from the rest as cauliflowers, although in every essential particular they are as truly broccolis as any of the more hardy and less elegant varieties.

Broccolis and cauliflowers require a rich deep soil. The cultivator who seeks to obtain a supply from a poor soil will be disappointed unless he happens to be favoured with a hot summer, and gives the plants regular and copious supplies of liquid manure. Only on good living can handsome heads of broccoli be produced, and, therefore, the first step towards a good supply is deep digging and abundant manuring. In our heavy damp clay land, all the varieties attain to their highest possible quality, but a rather light, well-tilled loam is to be preferred for varieties that produce their heads during winter and spring. However, we have cut abundance of the finest broccoli during ten months out of twelve, the times of scarcity being June and December; and though we have seen our plantations under water for days together, and at other times stiffened with fifteen degrees of frost, we have rarely suffered from the trials the plants are exposed to on our cold soil in the winter season. On those old garden soils that produce club, the seed-beds should be prepared by digging in lime or plaster, and the ground for planting out on should be prepared by double digging, and putting a heavy layer of good manure between the two spits. By such management the club will be exterminated, and the land will be constantly increasing in cleanliness and strength. As there is much to be said on the subject before us, and our aim is to convey the greatest possible amount of information in the fewest possible number of words, we shall arrange our observations under suitable headings, and the first will be—

**BROCCOLI AS AN ORDINARY GARDEN CROP.**—By good management broccolis may be cut during eight or nine months out of twelve,

February.



and entail no more trouble than a crop of cabbage. It is best to make three sowings—the first as early in March as the state of the heavens and earth will permit, the other two in the first week of April, and about the middle of May. Sow in drills in the same way as cabbage, and on as good a seed-bed as can be prepared for them. From these three sowings a constant succession of plants will be obtained, and they should be planted out as fast as they become large enough on land heavily manured and thoroughly well prepared by deep digging. The large growing sorts should be in rows three or four feet apart, and the plants three feet apart in the rows. Moderate growers, such as the Walcheren, may be two and a-half feet each way, and smaller sorts, such as the Cape, may be two feet apart each way. If the spring is late, the March sowing will be comparatively worthless, but the cost of seed is trifling, and it is always advisable to sow a pinch of broccoli with the other small seeds in March, for the chance of some strong plants to put out early. It is a great help to the supply if a sowing of Walcheren or Hammond's Improved be made in February in a seed-pan under glass, and the plants carefully handled for planting out in April. If at any stage the plants receive a check, or if allowed to grow to any considerable size in the seed-bed, they will fail at last, more or less. Therefore, showery weather should be chosen for planting out, but rather than delay too long waiting for showers, put out the plants when they are ready, and by shading and watering, help them to take hold of their new stations quickly, without, as we say, "feeling the move." The after culture consists in leaving them alone, for they will not even require water. Though if extra fine heads are desired, and the summer is hot and dry, or the soil too poor to do them justice, water must be given, and, in the case of a poor soil, the water must be flavoured with some nutritive material, such as guano, or drainings from the manure heap. In those tremendous summers of 1868 and 1870, we had as fine crops of broccolis and cauliflowers as in the rainy summers that preceded and followed them, but not one had any artificial waterings except for a few days after being first planted out. But then ours is a very deep, heavy, and productive soil, and for broccolis we assist it by laying a coat of fat manure between the two spits, as the trenching proceeds. Supposing a good selection to have been made from the seed-list, you will begin to cut nice broccolis in August, and continue cutting until frost stops the supply, which, perhaps, will not occur until January. Towards the end of February, if the weather is mild, the supply will be renewed, and will increase as the spring advances, and be at its height during April, and will come to an end during the latter days in May. Plants raised from seed sown under glass in February, and carefully managed afterwards, may give nice heads in July, which enlarges the scheme by one month in starting, and plants that have stood in a north aspect all winter may not flower until June, and this will enlarge the scheme by a month at winding up. Nevertheless, by what may be termed the rough and ready way of growing broccoli, there must be a break in the supply. To ensure continuous supplies, other and more troublesome methods of procedure must be



resorted to. This brings us to another section of the subject, namely,—

**BROCCOLIS AND CAULIFLOWERS ALL THE YEAR ROUND.**—To insure a continuous supply, there should be three sowings of Broccolis, as above advised, and a dozen sorts, at least, should be grown. But Cauliflowers must be grown also, and there should be three sowings of these, one at the end of August, another at the end of September, and another in February. In the far north, the August sowing will be most useful; in the far south, it is not advisable to sow until the beginning of October. It is impossible to advise for every climate, but this rule may be useful, that large plants are not to be desired before winter, and, therefore, a little judgment must be exercised in determining the dates of sowing. As soon as the plants are large enough to handle, they should be potted or planted in a bed in a frame in rather light soil, and be kept well aired all the winter to prevent spindling or rotting at the collar. As they will stand five, or even seven, degrees of frost without harm, it is not advisable to keep them closely muffled up at any time during winter; for, indeed, if they are weakened by coddling, they will in the end come to no good. The February sowing should be aided with a gentle heat, and the plants potted as soon as large enough, and after about ten days' enjoyment of a greenhouse temperature to assist them in filling the pots with roots, should be removed to a cold frame, and be gradually "hardened" preparatory to planting. Put out the autumn-sown plants first, and shelter them if the weather is bleak, but it is better to wait a week or two, and even to shift a lot into larger pots to keep them growing than to plant too early, for the check of exposure to cold, may cause them to "button," that is, produce heads the size of a florin, or crown-piece, of no use at all. From these several plantations you ought to cut fine heads from June onwards far into the autumn.

Now, let us suppose you have by some accident lost your autumn sown stock, and are speculating how to gain time, and keep up the supply by some other method. It would in this case be a good plan to sow in the first week of February and the first week of March a pinch each of Walcheren, Purple Cape, Hammond's White Cape, and Beck's Early Dwarf, and carefully nurse them, so as to be enabled to put out strong plants at the earliest moment the weather will permit. It may be worthy of notice, too, that all the foregoing sorts are worth trying for supplies in May and June, by sowing them in autumn, and planting them out in cheap protectors, such as Boulton's, or in ground vineries of wood or brick. In March they should be thinned to twenty inches apart; the thinnings planted out, and those remaining left to flower in the frames. It would be necessary to give plenty of air, and to take the glass off entirely at the end of April.

There yet remains the depth of winter to be provided for. It is important, therefore, to bear in mind that broccolis in flower may be kept a long time in perfect condition under cover during winter. If, therefore, in the latter days of December there is a good supply of nice heads of Walcheren, or any other good sort on the ground,

take them up, with roots and all complete, and plant them close together in dry earth in a shed, or any other suitable place from which they can be obtained as wanted. The winter supply is a question of weather as regards outdoor cutting, and of prudence as regards cutting under cover. In a mild open winter there will be plenty of nice broccolis turning in during January and February, provided suitable sorts are on the ground to produce them.

WINTER CULTURE demands a paragraph, because broccolis are considered tender things. It is customary in November to "lay them down." This process consists in heeling them over with their heads to the north without in any serious degree disturbing their roots. The practice may be needful in districts where the winters are usually more severe than in London, but on our cold wet clay in the valley of the Lea, five miles north of the metropolis, it is altogether unnecessary, for we grow broccolis largely, and never lay them down, and our losses in severe winters are really of no material consequence at all. Another practice preparatory to winter protection is to sprinkle the ground between the plants with salt, at the rate of ten or twelve bushels to the acre. This is done early in October, and is certainly not a waste of labour or of salt, for the result is a wholesale destruction of vermin, and a consequent protection of the plants from their ravages, during those mild winter and early spring days, when slugs and other such come forth in troops, and eat out the hearts of the best vegetables in the garden. It is worth remembering, too, that the salt is worth its cost as manure, and its presence in the soil will benefit the next crop.

WALCHEREN BROCCOLI demands a note, because of its distinctness and value. It may be sown at almost any season, and cut at almost any season. Indeed, we know not what a master of broccoli culture might do with it, if supplied with good seed, and denied a supply of any other. He could certainly, by good management, cut from it beautiful white heads of medium size very nearly all the year round, and we think the whole circle of the year might be compassed with it in a garden where all needful appliances were at hand. As it will not endure severe frost, it is rarely cut from open ground plantations after the end of the year, or before the end of July.

SPROUTING BROCCOLI also needs a separate paragraph, as it is not to be regarded as a high-class vegetable, though extremely useful in the cottage-garden. This should be sown early, and planted out early. We give our sprouting broccolis a space of four feet between the rows, and three feet between the plants, and then their leaves overlap, and we can scarcely go amongst them without doing mischief. As for the produce, it is enormous. The old Purple Sprouting is the best. The White Sprouting is useless, and the Late Sprouting scarcely worth having.

QUALITY.—Some of the sorts are described as having "leafy heads." This means that a considerable number of leaves peep up among the intersections of the flower. It is a fault, but quite a small one. The largest sized broccolis are usually considered the best. But small heads are preferable to large ones; though great



size is not a great defect, provided the form and texture are what they ought to be. In the spring of the year 1872, a correspondent sent us a head of Cattell's Eclipse that weighed 21 lbs. It was remarkably handsome; a wonder to behold. It was carefully cut from as required, and made five dishes on five successive days, and, from first to last, as a table vegetable, was about as perfect as any broccoli ever eaten, and in every case the fifth part came to table as complete as an individual head. As to colour, it is impossible there should be two opinions. The whiter the head the better, and the texture should be fine, and firm, and close, not a gap anywhere, and the general outline hemispherical. The Purple Cape is invaluable for its earliness, and we cannot do without it; but its colour is faulty, and we should be well off if we had a white Cape to equal it; but we have not, though Hammond's White Cape is good.

SELECTION OF VARIETIES. — The following are probably the best broccolis in cultivation for general purposes; they are selected from a hundred sorts grown on our trial ground last year:—*Baskett's Late*, in use from March 27 to April 16. *Brimstone*, in use April 5 to April 20. *Brown's Incomparable Hardy*, in use April 2 to April 30. *Carter's Champion*, in use April 3 to May 18. *Cattell's Eclipse*, in use April 13 to May 20. *Early White*, in use April 6 to April 26. *Grainger's White*, in use Feb. 28 to March 28. *Hammond's Improved*, in use Sept. 4 to Dec. 1. *Large Late White*, in use April 6 to April 26. *Lake's Fine Late*, in use April 20 to May 18. *Maber's Giant*, in use March 10 to April 15. *Penzance*, in use Feb. 28 to April 2. *Reading Giant*, in use March 17 to April 10. *Snow's Winter White*, in use April 2 to April 15. *Sutton's Superb*, in use Feb. 28 to April 12. *Walcheren*, in use Aug. 15 to Dec. 1.

From the foregoing sixteen we will select six, and they shall be *Walcheren*, *Grainger's*, *Sutton's Superb*, *Lake's Late*, *Carter's Champion*, *Cattell's Eclipse*. The best cauliflowers are, *Frogmore Forcing*, *Early London*, and *Lenormands*.

For special purposes the following deserve attention as distinct and good: *Autumn Purple Cape*, and *Hammond's White Cape*, for planting close and insuring early supplies. *Beck's Early Dwarf*, *Hammond's White Cape*, and *Miller's Dwarf*, for frame culture. *Carter's Champion*, *Cattell's Eclipse*, *Dilcock's Bride*, *Hammond's Improved*, *Hampton Early White*, *Late Goschen*, *Maber's Giant*, *Malta*, *Reading Giant*, *Sutton's Superb*, and *Wandlass Wonderful* are frequently remarked upon in our note-books as beautiful in form and colour, and usually attaining to a considerable size. We have dismissed *Dancer's Pink Cape* as "not wanted," but, as it makes extremely pretty heads, it may be turned to account for exhibition.

S. H.

---

LARGE DATE PALM.—The *Revue Horticole* mentions that a Date Palm, which recently died in the establishment of M. Huber and Co., of Hyères, France, has been cut down, and that its trunk measured 14 metres from the ground to the head, 3.70 in girth at the base, 1.95 in the middle of the trunk, and 1.50 at the summit. The tree was sixty-five years old, and one of the largest in France.