

beans, and other robust-growing crops, to be grown alternately, and with equal success and advantage as roots, in one, two, three, four, or five rows, at the will of the grower, with few or no weeds to retard their growth. (By this new mode of fallowing every year, no weeds are ever allowed to seed; whilst by the old system, every four years, and sometimes never at all, with a sacrifice of a whole year's crop, all weeds are allowed to seed, and to be fostered in the crops, so as not possibly to be eradicated, even with the greatest vigilance, during one's whole lease, or it may be a century, the seeds always germinating when they are brought to the surface, and not before, though it may be for 100 years.) Though not all to be done by the spade, that being impracticable, for want of labourers to perform it; yet imitating it with as much success and profit, by subsoiling the cropped moiety, either by steam or the common plough. The manurial application for this crop of mangels was deposited during the previous autumn, *all* in the centre of the stetch or moiety of land to be cropped, as I recommend for beans and other exhausting crops; with the exception of wheat, however, which I consider makes it grow too rank, and in patches, liable to be mildewed, and root-fallen, the straw frothy and the grain late and dwindled. The grand points to be studied and secured for obtaining a full weight of roots, or crop of any kind, are deep cultivation, and a uniformity of plants singled out at an early stage of their growth, all commencing or starting into growth at one time. Moreover, this successful rule holds good in degree, let the plants be extravagantly thick or thin, though if both are avoided, the results will be the best of crops. For ordinary practice and successful issues, I would advise that double rows of mangels be planted as I have described; but if any deviation is made, to let the plants stand thicker than mine were, say 50 on the two rows, every 12 or 13 lineal yards, which makes a rod or square perch on 7ft. 4in. stetches, commonly called 8ths, or 8 furlows, viz., taking into account both moieties, the cropped and the uncropped fallowed portions. Thus, reckoning only 6 lbs. for each bulb, which is a low estimate, would be 300 lbs. a rod, or 40,000 lbs., or 21 tons, 8 cwt. 64 lbs. per acre, with half the land at rest, and clean fallowed, be it remembered, into the bargain. The advantage of transplanting mangels have lately been questioned and discussed in various journals. Allow me to advert to it, and to observe, that repeated experiments in the misplanted spaces, where the seed chanced not to germinate, or not to produce a uniform crop, have with me signally failed. In fact, for forty years in my remembrance, nine cases out of ten, crops of all kinds, transplanted, or otherwise patched with another crop in vacant parts, have invariably proved a failure, and not worth

the trouble and expense bestowed upon them. The go-ahead plants have generally encroached and gained the ascendancy over the laterals, transplanted roots, especially in dry seasons, at the best have eventuated with very uncer and unmarketable samples; whilst only half plant, well developed, would have been more valuable. Notwithstanding, however, the ill-success of the practice above alluded to, namely, from a mixed crop, it has, nevertheless proved advantageous to transplant mangels swedes as a full and permanent crop, as other Brassicas are planted, on prepared land during spring, and well manured in winter, fallow purposely in the two months of April and May, whilst good stout plants are being raised in advance, thinly, on reserve ground, or on a nursery bed, especially prepared for that purpose in the month of March. Thus a great saving of seed may be effected, an object when it is scarce and dear, and not likely to germinate well [instance the present year] and no more plants need be raised than are absolutely wanted. Moreover, a fine tilth and clean fallow, two months longer than could possibly be cured if the seed had been obliged to be so where it was to remain, with the land only prepared, planted early, and full of weeds. Nursery plants should be carefully taken up with the roots entire, raising them with a fork, only to be slightly root-tipped, or tailed. In case of no rain intervening, or otherwise, roots should be puddled in thick artificial manure water, or urine; in this case one good watering afterwards will suffice to establish growth, and to ensure a uniform, good, weighty crop. Care must be taken that bulbs are not bruised by the dibble or hoe, although a wound may heal, or callous, thereby greatly deteriorated, and takes the place of a sound plant. If transplanted in two rows on the centre of each stetch, the terstices may be clean fallowed with profit. Advantage for future crops, it may be for same kind of crop again, or it will be adapted to begin my Lois Weedon practice, growing wheat, or beans, two, three, four, or five rows on the middle of each stetch, and one moiety of the land would be clean fallowed every year, and all weeds set at nought every first year, and as long as the practice was continued. The beginning of Lois Weedon's practice ought, in fairness, to begin on fallowed weeds the first year being objectionable rule. Thus, as the Rev. S. Smith, of Loisdon, rightfully and truthfully observes, "the produce of the half is as much as the additional benefit of the clean, deep, ready-prepared fallows for future crops, beyond all price."

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