

The belief that plants are thus benefited, whether or not well founded, has been firmly maintained from the time of Columella, who wrote shortly after the Christian era, to the present day; and it now prevails in England, France, and Germany.<sup>1</sup> A sagacious observer, Bradley, writing in 1724,<sup>2</sup> says, "When we once become Masters of a good Sort of Seed, we should at least put it into Two or Three Hands, where the Soils and Situations are as different as possible; and every Year the Parties should change with one another; by which Means, I find the Goodness of the Seed will be maintained for several Years. For Want of this Use many Farmers have failed in their Crops and been great Losers." He then gives his own practical experience on this head. A modern writer<sup>3</sup> asserts, "Nothing can be more clearly established in agriculture than that the continual growth of any one variety in the same district makes it liable to deterioration either in quality or quantity." Another writer states that he sowed close together in the same field two lots of wheat-seed, the product of the same original stock, one of which had been grown on the same land and the other at a distance, and the difference in favour of the crop from the latter seed was remarkable. A gentleman in Surrey who has long made it his business to raise wheat to sell for seed, and who has constantly realised in the market higher prices than others, assures me that he finds it indispensable continually to change his seed; and that for this purpose he keeps two farms differing much in soil and elevation.

With respect to the tubers of the potato, I find that at the present day the practice of exchanging sets is almost everywhere followed. The great growers of potatoes in Lancashire formerly used to get tubers from Scotland, but they found that "a change from the moss-lands, and *vice versâ*, was generally sufficient." In former times in France the crop of potatoes in the Vosges had become reduced in the course of fifty or sixty years in the proportion from 120-150 to 30-40 bushels; and the famous Oberlin attributed the surprising good which he effected in large part to changing the sets.<sup>4</sup>

A well-known practical gardener, Mr. Robson,<sup>5</sup> positively states

<sup>1</sup> For England, see below. For Germany, see Metzger, 'Getreidearten,' 1841, s. 63. For France, Loiseleur-Deslongchamps ('Consid. sur les Céréales,' 1843, p. 200) gives numerous references on this subject. For Southern France, see Godron, 'Florula Juvenalis,' 1854, p. 28.

<sup>2</sup> 'A General Treatise of Husbandry,' vol. iii. p. 58.

<sup>3</sup> 'Gardener's Chronicle and Agriculture Gazette,' 1858, p. 247; and for the second statement, *Ibid.*, 1850, p. 702. On this same subject, see also

Rev. D. Walker's 'Prize Essay of Highland Agricult. Soc.,' vol. ii. p. 200. Also Marshall's 'Minutes of Agriculture,' November, 1775.

<sup>4</sup> Oberlin's 'Memoirs,' Eng. transl., p. 73. For Lancashire, see Marshall's 'Review of Reports,' 1808, p. 295.

<sup>5</sup> 'Cottage Gardener,' 1856, p. 186. For Mr. Robson's subsequent statements, see 'Journal of Horticulture,' Feb. 18, 1866, p. 121. For Mr. Abbey's remarks on grafting, &c., *Ibid.*, July 18, 1865, p. 44.