

In the pea itself we have every tint between almost pure white, brown, yellow, and intense green; in the varieties of the *sugar peas* we have these same tints, together with red passing through fine purple into a dark chocolate tint. These colours are either uniform or distributed in dots, striæ, or moss-like marks; they depend in some cases on the colour of the cotyledons seen through the skin, and in other cases on the outer coats of the pea itself. In the different varieties, the pods contain, according to Mr. Gordon, from eleven or twelve to only four or five peas. The largest peas are nearly twice as much in diameter as the smallest; and the latter are not always borne by the most dwarfed kinds. Peas differ much in shape, being smooth and spherical, smooth and oblong, nearly oval in the *Queen of the Dwarfs*, and nearly cubical and crumpled in many of the larger kinds.

With respect to the value of the differences between the chief varieties, it cannot be doubted that, if one of the tall *Sugar-peas*, with purple flowers, thin-skinned pods of an extraordinary shape, including large, dark-purple peas, grew wild by the side of the lowly *Queen of the Dwarfs*, with white flowers, greyish-green, rounded leaves, scimitar-like pods, containing oblong, smooth, pale-coloured peas, which became mature at a different season: or by the side of one of the gigantic sorts, like the *Champion of England*, with leaves of great size, pointed pods, and large, green, crumpled, almost cubical peas,—all three kinds would be ranked as distinct species.

Andrew Knight⁸⁵ has observed that the varieties of peas keep very true, because they are not crossed by insects. As far as the fact of keeping true is concerned, I hear from Mr. Masters of Canterbury, well known as the originator of several new kinds, that certain varieties have remained constant for a considerable time,—for instance, *Knight's Blue Dwarf*, which came out about the year 1820.⁸⁶ But the greater number of varieties have a singularly short existence: thus Loudon remarks⁸⁷ that “sorts which were highly approved in 1821, are now, in 1833, nowhere to be found;” and on comparing the lists of 1833 with those of 1855, I find that nearly all the varieties have changed. Mr. Masters informs me that the nature of the soil causes some varieties to lose their character. As with other plants, certain varieties can be propagated truly, whilst others show a determined tendency to vary; thus two peas differing in shape, one round and the other wrinkled, were found by Mr. Masters within the same pod, but the plants raised from the wrinkled kind always evinced a strong tendency to produce round peas. Mr. Masters also raised from a plant of another variety four distinct sub-varieties, which bore blue and round, white and round, blue and wrinkled, and white and

⁸⁵ ‘Phii. Tract.’ 1799, p. 196.

⁸⁶ ‘Gardener’s Magazine,’ vol. i., 1826, p. 153.

⁸⁷ ‘Encyclopædia of Gardening,’ p. 823.