

Chrysanthemum revert to the aboriginal yellow tint. Many other cases included in the list are probably due to the plants being of crossed parentage, and to the buds reverting either completely or by segments to one of the two parent-forms.¹⁵⁴

We may suspect that the strong tendency in the Chrysanthemum to produce by bud-variation differently-coloured flowers, results from the varieties having been at some time intentionally or accidentally crossed; and this is certainly the case with some kinds of Pelargonium. So it may be to a large extent with the bud-varieties of the Dahlia, and with the "broken colours" of Tulips. When, however, a plant reverts by bud-variation to its two parent forms, or to one of them, it sometimes does not revert perfectly, but assumes a somewhat new character,—of which fact, instances have been given, and Carrière gives¹⁵⁵ another in the cherry.

Many cases of bud-variation, however, cannot be attributed to reversion, but to so-called spontaneous variability, as is so common with cultivated plants raised from seed. As a single variety of the Chrysanthemum has produced by buds six other varieties, and as one variety of the gooseberry has borne at the same time four distinct kinds of fruit, it is scarcely possible to believe that all these variations are due to reversion. We can hardly believe, as remarked in a previous chapter, that all the many peaches which have yielded nectarine-buds are of crossed parentage. Lastly, in such cases as that of the moss-rose, with its peculiar calyx, and of the rose which bears opposite leaves, in that of the *Imantophyllum*, &c., there is no known natural species or variety

¹⁵⁴ It may be worth while to call attention to the several means by which flowers and fruit become striped or mottled. Firstly, by the direct action of the pollen of another variety or species, as in the cases given of oranges and maize. Secondly, in crosses of the first generation, when the colours of the two parents do not readily unite, as with *Mirabilis* and *Dianthus*. Thirdly, in crossed plants of a subsequent generation by reversion, through either bud or seminal generation. Fourthly, by re-

version to a character not originally gained by a cross, but which had long been lost, as with white-flowered varieties, which we shall hereafter see often become striped with some other colour. Lastly, there are cases, as when peaches are produced with a half or quarter of the fruit like a nectarine, in which the change is apparently due to mere variation, through either bud or seminal generation.

¹⁵⁵ 'Production des Variétés, p. 37.