

“down.”²¹ I have discussed the connection between pelorism and a central position, partly because some few plants are known normally to produce a terminal flower different in structure from the lateral ones; but chiefly on account of the following case, in which we see a tendency to variability or to reversion connected with the same position. A great judge of Auriculas²² states that when one throws up a side bloom it is pretty sure to keep its character; but that if it grows from the centre or heart of the plant, whatever the colour of the edging ought to be, “it is just as likely to come in any other class as in the one to which it properly belongs.” This is so notorious a fact, that some florists regularly pinch off the central trusses of flowers. Whether in the highly improved varieties the departure of the central trusses from their proper type is due to reversion, I do not know. Mr. Dombrain insists that, whatever may be the commonest kind of imperfection in each variety, this is generally exaggerated in the central truss. Thus one variety “sometimes has the fault of producing a little “green floret in the centre of the flower,” and in central blooms these become excessive in size. In some central blooms, sent to me by Mr. Dombrain, all the organs of the flower were rudimentary in structure, of minute size, and of a green colour, so that by a little further change all would have been converted into small leaves. In this case we clearly see a tendency to proliferation—a term which I may explain, for those who have never attended to botany, to mean the production of a branch or flower, or head of flowers, out of another flower. Now Dr. Masters²³ states that the central or uppermost flower on a plant is generally the most liable to proliferation. Thus, in the varieties of the Auricula, the loss of their proper character and a tendency to proliferation, also a tendency to proliferation with pelorism, are all connected together, and are due either to arrested development, or to reversion to a former condition.

The following is a more interesting case; Metzger²⁴ cultivated in Germany several kinds of maize brought from the hotter parts of America, and he found, as previously described, that in two or three generations the grains became greatly changed in form, size, and colour; and with respect to two races he expressly states that in the first generation, whilst the lower grains on each head retained their proper character, the uppermost grains already began to assume that character which in the third generation all the grains acquired. As we do not know the aboriginal parent of the maize, we cannot tell whether these changes are in any way connected with reversion.

In the two following cases, reversion comes into play and is determined by the position of the seed in the capsule. The Blue Imperial pea is the offspring of the Blue Prussian, and has larger seed and

²¹ Hugo von Mohl, ‘The Vegetable Cell,’ Eng. tr., 1852, p. 76.

²² The Rev. H. H. Dombrain, in ‘Journal of Horticulture,’ 1861, June 4th, p. 174; and June 25th, p. 234;

1862, April 29th, p. 83.

²³ ‘Transact. Linn. Soc.,’ vol. xxiii., 1861, p. 360.

²⁴ ‘Die Getreidearten,’ 1845, s. 208, 209.