

EFFECTS OF UNINTERRUPTED SUNLIGHT ON PLANTS.—Dr. Schuebeler, of Christiana, has published in the Norwegian *Naturen* the results of some experiments on the acclimatization of southern plants in Sweden and Norway. His first experiments relate to the effect of the almost uninterrupted sun of Scandinavia on winter wheat. Samples from Bessarabia and Ohio sown showed in the first crop an increase in size and weight of grain, together with a deepened color. Increased development of the pigment of plants is shown also in the common garden flowers of central Europe, which when raised in Norway take on richer color. *Veronica serpyllifolia*, for example, changes from pale to deep blue, while *Trientalis Europæa*, naturally white, becomes decidedly pink. Under continuous sunlight also plants which usually fold their leaves at night, such as *Mimosa pudica*, kept them always open. It is also found that the aroma of fruits and vegetables is much increased. Some of the most savory of European garden vegetables when grown in Norway become absolutely disagreeable to the taste. This increase of aroma points to what may and ought to become a profitable industry in the Scandinavian peninsula, viz., the raising of those plants which are valuable for their yield of fixed and essential oils, inasmuch as the per cent. obtainable from a given weight is much increased by growth under these peculiar conditions. But while aroma, which seems thus dependent on light is much augmented, sweetness, depending on heat, is correspondingly lessened by moving northward. This is especially noticeable in small fruits, such as the strawberry, plum, cherry, etc. Dr. Schuebeler's experiments extended over 30 years and doubtless the full text of the communications would be most interesting.—C. R. B.

RED CALYX IN SAMBUCUS CANADENSIS, L.—As the botanizing season is again upon us it may be well to publish the following note of observations made last summer in this vicinity. By accident I found a bush of the common Elder in which every calyx was of an intense bright purplish-pink color, and this was true of all the flowers and unexpanded flower-buds on the whole plant. Pedicels and peduncles were the usual white, but all, including the calyx, were decidedly hirsute. A further examination proved that about one-fourth of all the shrubs in that patch had the calyx more or less tinted, there being about 30 in all. During the remainder of the summer I examined a great many plants and found the calyx more or less colored and hirsute in near one-third observed. In every instance where the calyx was tinted it was also hairy, but in two examples I found the calyx hairy but not tinted. The color was near that of red aniline. The plants that grew in rich alluvial soil appear to be most frequently colored.—J. SCHNECK, *Mt. Carmel, Ill.*

OBSERVATIONS ON REMARKABLE FORMS OF TRITICUM REPENS.—I am indebted to Wm. Boott, Esq., for the following: "In the English Flora Sir James Smythe says under *Triticum repens*, 'Schrader describes a remarkable state of this grass figured in Leen, t. 12, f. 4, 1,



1880. "Effects of Uninterrupted Sunlight on Plants." *Botanical gazette* 5(4), 40–40. <https://doi.org/10.1086/325345>.

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