

trated the spring fogs of Nova Scotia, and does not know what it is to enjoy fresh vegetables after having been frozen out of them for half a year. Beneath the leaf of the rhubarb however, lies the poisonous snake, to which we wish to call attention.

Rhubarb as sold in the Halifax market consists not of the stalks only, but of the *ribs of the leaves*. The coloured gardeners of Dartmouth and Preston, anxious to give bulk for the money, strip off the *blades of the leaves*, and allow the *ribs* to remain, as if they were edible material as well as the stalks. We do not blame the coloured persons. They do not pretend to say which are the lions and which are the tigers. The ladies and gentlemen of Halifax pay their money and have their choice. All we wish to say is, that wholesome as are rhubarb stalks, the leaf ribs are anything but wholesome, and a large number of well authenticated cases of poisoning from eating them have been reported in the medical and scientific journals of London and other cities. After this warning, we hope that housewives will be careful to strip off the *leaf ribs* and throw them away, before cooking their rhubarb stalks.

CULTIVATION OF SUMACH (RHUS CORIARIA, L.)

BY PROFESSOR INZENZA, OF PALERMO.

At Colli, it covers a large area of the dry slopes of the Sicilian mountains. The soil best adapted for sumach is one eminently dry. It thrives especially in hilly lands with gentle slopes, where the water drains off rapidly. It is propagated by suckers, which spring up around the parent plant. These are set in lines at intervals of 2 feet in rectangular holes. The leaf is largely exported as a tanning material both to England and America. The gathering takes place in September, when the leaves are put into baskets and carried to the thrashing floor, where they are thrashed with the flail, which breaks up the leaves and separates the petioles and midribs. The broken leaves are then sent to the mill and reduced to powder. The value of sumach is about 10s. a quintal or 175 pounds. By a return from the custom-house it appears that the export of sumach from Palermo, on which duty was paid, in 1867 was:—In leaf, 2282 tons; in powder, 15,413 tons.—Illustrations of the mode of culture and process of preparing the leaf were exhibited, and samples of the sumach, as it is known in commerce. Dr. Cleghorn remarked that he believed that the *Rhus coriaria* might be profitably cultivated in the hills of the Punjab, which is nearly in the same parallel of latitude with its natural habitat, and where *Rhus cotinus* and other species are widely diffused.—*Bot. Soc., Edin.*

REPORT ON THE OPEN AIR VEGETATION AT THE ROYAL BOTANIC GARDEN, EDINBURGH, MAY, 1868.

BY MR. McNAB.

At the last meeting of the Botanical Society, (9th April, 1868), I stated that vegetation had gone on at the same rapid pace as it had done during the previous months, most plants being from three to four weeks in advance of ordinary seasons. The weather since last meeting has been comparatively mild, with the exception of the 10th, 11th, 12th, and 14th April, when the morning temperatures fell respectively to 30°, 27°, 31°, and 28°; also on the 6th of May when the thermometer again indicated 28°, all other morning temperatures varying between 35° and 48°. This last frost has done considerable damage to the young growths of many of the Sikkim Rhododendrons, while the hybrid varieties are apparently untouched. During the past month the progress made by many of the trees and shrubs is remarkable, and for my own part I have never seen so many of them in flower during the month of April as have been observed this year. Amongst them may be recorded lilacs, laburnums, thorns, particularly *Crataegus præcox* and *C. oxyacanthoides* (the last mentioned being in full flower on the 22d day of April) also the perfumed cherry (*Prunus Mahaleb*), double flowering cherry, *Gean*, *Wistaria sinensis*, *Robinia Caragana*, numerous species of *Cytisus*, *Azalea pontica*, &c., &c. Many herbaceous plants are also far advanced when compared with former years, the lily of the valley for instance, which in this part of the country is rarely seen in flower in open borders before the end of May, was partially in bloom this year on the 1st of May. At the present date (14th May) the horse-chestnut, double, single, and scarlet thorns, bird cherry, service trees, *Rhododendron Catawbiense*, and *R. ponticum*, Ghent azaleas, with many others are now in flower, kinds rarely seen in bloom before the end of May, and in this part of the country generally not sooner than the beginning of June. However, locust trees, deciduous magnolias, tulip trees, hop and common hornbeam, *Catalpa* tree, liquid-amber, walnut, *Platanus occidentalis*, deciduous cypress, with many oaks, chiefly the American varieties, also ash, and some varieties of beech are not much further advanced than they usually are during ordinary seasons. As a rule, it may be stated that most of the North American trees are generally the last of coming into leaf.

The prevalence and intensity of the north-westerly gales during the month of April has done considerable damage to many of the forest and ornamental flow-

ering trees, particularly those kind whose foliage was early developed, the western side of many being nearly leafless, or with scanty foliage, while the eastern side is full of foliage and of a rich green colour. This is particularly to be remarked in limes, horse-chestnuts, birches, sycamores, geans, and larches. In the case of thorns, many of the trees, where much exposed, are perfectly brown on the western side, while the east side is green, and now flowering abundantly.—*Bot. Soc., Edin.*

CARE OF PASTURES.

Observations, made this spring for the purpose, have shown the great superiority of the new grass where it has grown on land not closely grazed the previous autumn. The protection which the old grass afforded from the severe freezing and the sharp blasts of winter, resulted in a growth from three to five times as great as on closely grazed surfaces, during the first start of the fresh grass. When the latter had grown an inch, the former, by actual measurement, had grown four or five inches. There are several advantages in permitting long grass in autumn, and indeed at all times of the year. Physiologists, as well as practical horticulturists, know that keeping the foliage cropped short, lessens the extension and developments of the roots. A pasture grazed short all the time will therefore be found to have a thinner turf or mass of roots than one that has a luxuriant growth. The stronger roots will make an early and more vigorous push in spring. The old grass, rotted down, serves as a top-dressing. It protects the young plants when the snow disappears, and keeps them warmer. The earth freezes less in winter when thus protected. We have found by examining the soil in the early part of winter, where a bare and exposed surface had frozen down to a depth of six inches, that closely grazed pasture was frozen four inches, and grass a few inches high, making a covering of two or three inches, was frozen two or two and a half inches, while a thicker covering, as in rich pastures, had prevented the freezing of more than an inch. This striking difference must have a great influence on early growth.

Some farmers pursue the mistaken idea of turning too many animals into their pastures, with the hope of getting all they can from the land. He is like the man who would starve his team for the purpose of reducing the expenses of horse labor, or him who should feed out in spring all his seed, that he might sell the rest of his grain. They would obtain more from their field if they allowed the grass to grow a foot high. We have seen those who were too poor to be economical, and wasted half their grain feed by keeping it con-