

require an attentive and particular treatment, none such are inserted in this list.

- Acrostichum alciocorn, Sw.
- Adiantum concinnum, H. and Kth.
- " cuneatum, L. & F.
- " formosum, Br.
- " moritzianum, Lk.
- " pubescens, Schk.
- Allantodia australis, Br.
- " axillaris, Kaulf.
- " umbrosa, Br.
- Anemia fraxinifolia, Rad.
- Aspidium coriaceum, Sw.
- " eburneum
- " elongatum, Sw.
- " falcatum, Sw.
- " molle, Sw.
- " patens, Sw.
- " pennigerum, Sw.
- " proliferum, Br.
- " pungens, Kaulf.
- Asplenium bulbiferum, Forst.
- " decurtatum, Lk.
- " flabellifolium, Cav.
- " monanthes, L.
- " planicaule, Wall.
- Asplenium premorsum, Sw.
- " virens, Presl.
- Blechnum australe, L.
- " brasiliense, Desv.
- " gracile, Kaulf.
- " striatum, Br.
- " triangulare, Lk.
- Cheilanthes davallioides, W.
- Cibotium glaucescens, Kunze. (Barometz).
- Darea cicutaria, W.
- " Odontites, W.
- Davallia canariensis, Sw.
- " elegans, Sw.
- " pyxidata, Cav.
- Dicksonia antarctica, Labell.
- Diplazium lasiopteris, Kunz.
- " Shepherdii, Lk.
- Doodia aspera, Br.
- " caudata, Br.
- " Kunthiana, Gaud.
- Gymnogramma ochracea, Presl.
- Lomaria antarctica, Carm.
- " attenuata, W.
- " Gilliesii, H. and Gr.
- " nuda, W.
- " Patersonii, Spr.
- " procera, Spr.
- Nephrodium decompositum, Br.
- " Ottonis, Lk.
- Nipholobus Lingua, Spr.
- " rupestris, Spr.
- Nothochlana distans, Br.
- " Beckloui, Kunze.
- Polypodium aureum, W.
- " Billardieri, Br.
- " concinnum, W.
- " decursive pinnatum
- " leptopodium, H. Ber.
- " phymatodes, L.
- Pteris arguta, Vahl.
- " crenata, Sw.
- " cretica, L.
- " falcata, Br.
- " hastata, Sw.
- " Kingiana, End.
- " laeta
- " longifolia, L.
- " pedata, L.
- " polita, H. Ber.
- " serrulata, L.
- " spinulosa, Rad.
- " tremula, Br.
- " umbrosa, Br.
- " vesperillonis, Labill.
- Woodwardia radicans, Sw.

—D. Cameron, Botanic Garden, Birmingham.

Home Correspondence.

Subjects affected by the Potato Disease.—I perceive by the *Chronicle* of the 26th inst. that you are not aware of any other species of plant but the Solanums [we did not say so], being attacked with the prevailing blight, erroneously termed the Potato murrain. The following facts will, however, fully satisfy you that, be the disease what it may, it is not confined to any particular species, as the accompanying list will testify. I may just observe that I first detected its ravages in the last days of July and the first week of August. 1st. Tomatoes: every fruit set up to the 1st of August quite unfit for use, and scarcely a leaf left on the plants; dressed them heavily with caustic lime, which, in my opinion, completely checked the further progress of the malady, as the fruit since set are as fine as could be wished for, and no trace of disease to be found. 2d. The Solanum crispum nearly destroyed, same time, and in manner. 3d. The Solanum dulcamara in full berry at the time, and almost every berry infected precisely as the Tomatoes. 4th. All my late planted Dahlias severely infected, both roots and stems. The early, and consequently more matured ones, only very slightly touched. 5th. A crop of very luxuriant Spinach entirely cut off. N.B. Close by some let run up for seed, not in the least affected; it had lost its succulency. 6th. An entire square of curled Endive swept away in one week. N.B. This crop was highly manured with stable dung and guano; another plantation on poorer land not in the least affected. 7th. Every Lettuce (and there were several thousands), on the first week of August, all but destroyed. 8th. All the late-sown Windsor Beans, not a pod left. 9th. Almost every plant of the common blue border Iris greatly affected; the semi-tuberous roots, many of them quite gone, just like the Potato. And 10th, and lastly, the most remarkable of the whole, viz., the Vine! This occurred in an old Vinery, a very late house. The fruit is just now stoning, and known among gardeners as the Grove-end Sweetwater. There are three or four bunches affected precisely similar to the Tomatoes, and as the Berries get more pellucid, it is most interesting to watch the progress of the brown taint—plant our worthy friend Mr. Moore would call it. The above will establish the fact that the disease in question is not confined to any particular species; consequently, the doctrine of the dying out of the Potato falls to the ground.—*J. Walker, Viceregal Gardens, Sept. 28.*

The Hedgehog Carnivorous.—Two years ago I had a brood of six young ducks under a hen, and I put them into a greenhouse one evening for warmth. A hedgehog was brought me, and was let loose in the same place for the night, and in the morning every young duck was dead, having had their heads gnawed through, and the brain eaten, the body being untouched; now, no animal of any other sort could have done it. And if any one doubts the carnivorous propensities of the hedgehog, let him try for himself.—*M. S. Y.*

Brunsvigia Josephina.—This fine bulb is much more hardy than is generally imagined. Some time since, a friend, who had got tired of keeping one for years in a greenhouse without an appearance of bloom, handed it over to me in disgust. Encouraged by the success of some former essays of the same kind, I determined on planting it in the open border, close under a south-west wall (of itself a certain degree of protection from wet and frost). The first season it seemed to remain dormant, but bloomed the ensuing autumn, and is now in flower for the third year running, the head of blossom consisting of 36 spikes; and, I have but little doubt, if the fine weather lasts a fortnight longer, it will ripen abundance of seed. The soil of my garden is a sound strong loam, and the only protection that has been given during winter is a common bell glass with a Russia mat

thrown over it; this filled with Moss or straw would, of course, be still more effectual; but here it is not required. The neck of the bulb was left just level with the surface.—*H. D., Guernsey, Sept. 22.*

Potato Disease.—It has struck me that the following fact may be of some value to some of your correspondents who talk about the necessity and desirableness of getting Potatoes anew from the original stock in South America! I have a considerable quantity of this much-to-be-desired stock, obtained in the following manner. In the spring of 1835 (the autumn of the S. hemisphere), Mr. Darwin collected some seeds from ripe tubers, in the Cordillera of central Chili, in a most un-frequented district, many miles from any inhabited spot, and where the plant was certainly in a state of nature. These vegetated under Professor Henslow's care in the year 1836 or 1837, and in that year or 1838, a tuber was given me by Mr. Darwin. It was either three or four years before the Potatoes from it became eatable. They are now good both for eating and keeping, and good bearers. I had them growing last year among many other kinds; and as they are a late variety, they had not ceased growing when the disease appeared in Cheshire. They fared exactly the same as other kinds, having the blotch in the leaf and a few tubers decayed. This year the haulm was destroyed totally, in the same manner as all my Potatoes were; and on taking up the tubers I find about the same number diseased as in other kinds. I fear this decides the point as to the uselessness of procuring seed from even the fountain head—the wild stock itself. As I have intruded thus far, I will add a few words as to the result of my own experiments and observations last year and this. I felt no doubt last year that the disease was communicated from the south of England—for this reason: when I first observed it in the south, we had not a speck upon the leaves, nor an unsound Potato. This continued long after grievous complaints in the south, until at length it seemed to gradually creep to us, and kept proceeding northward, but did not work very far in Scotland. None of my early Potatoes, and scarcely any second earlies, were touched, being raised before the disease came to us; the second earlies were, however, spotted in leaf. The produce of those early Potatoes this year was little injured in the tubers; but the haulm was destroyed. The second earlies of last year, of which the foliage only was slightly specked then, have been this year almost totally destroyed, after yielding an abundant crop, but of which the tubers almost all decayed. I have this year crops of seedling Potatoes—autumn sown, early and late in the year, with and without manure, and I can see no difference in them. Some crops rather better than others in the tubers; but of all, the haulm totally destroyed, and most rapidly in the best growing crops. I see that some of your correspondents state that in crops of which the haulm was destroyed, they could see no disease in the tubers. May not this have arisen from the diseased tubers being quite rotted away? I have seen this the case, so that you could not discover them without a very diligent examination, and the remainder of the crop was to all appearance quite sound. That the disease is sometimes communicated by the air I have no doubt is the fact. Adjoining my Potato-field I had some Dahlias, and when the disease attacked the Potato-haulm so virulently as to make the air for a considerable distance most disagreeable, blotches appeared upon the Dahlia-leaves which could not be mistaken. They began similarly, had the white appearance under the leaf, and soon had the same scorched black look. They, however, outgrew it, and it appears quite gone. Whatever may have been the cause and origin of this destructive agent, about which all seem as yet about equally in the dark, does it not seem, weighing all the evidences on the point from your numerous correspondents, that both parties are right—those who say it comes, or rather is promulgated, from within—and those who say it comes from without. This is the conclusion I have come to after carefully watching it last year and this in a great Potato-growing country, and from numerous experiments. You asserted, I think, at one time your conviction that the spot in the leaf never came till decay had commenced in the stem just above the tubers. In many instances I find this correct; but in many more I could not detect the least discolouration or decay in any part of the plant or tuber when the blotch first appeared of a palish hue above, and a mildew look underneath the leaf. I believe this is after the real commencement of disease in the plant, when communicated through the medium of the air; but I imagine that after that the plant is tainted, and its tubers the following year have the seeds of death within themselves.—*W. D. F.*

Horticultural Society's Prize-list for 1847.—Observing that a Silver Gilt Medal is offered for hardy hybrid shrubs, at the Exhibitions in 1847, allow me to suggest the genus *Erica* as a subject for hybridising. Would it not be possible to raise hybrids between our hardy species and some of the Cape species, which might probably prove as hardy as the splendid hybrid *Rhododendrons*.—*Milnthorpe.*

Thunbergia Chrysope.—By the following treatment this beautiful species has been induced to expand daily from 20 to 60 of its delightful blossoms. It was potted from a 5-inch pot in April 1845, using a compost of turfy peat, loam, and sand into a 12-inch pot, and placed in the plant stove, where it soon commenced growing very fast; it was frequently stopped with a view to induce it to flower, but without effect. This treatment, however, caused the shoots to become short-

jointed and somewhat woody, which proved to have had a great tendency in inducing it to flower. As the winter approached, no signs of its flowering having exhibited themselves, water was gradually withheld, just enough being given to prevent it from losing its foliage, and it was removed to the coolest part of the house, where it remained until spring, when it was brought from its winter quarters and placed in a situation as much exposed to the sun as possible, a liberal allowance of water being now given it. About the beginning of May it showed signs of flowering from the axils of almost every leaf, and from that time it was occasionally watered with some good clear liquid manure, which caused the flowers to expand much more freely. It will thus be seen that although a plant does not happen to bloom the first season, success must not be despaired of; for by treating it through the winter as above, the labour will be amply repaid in next season.—*James Grant, Bowood Gardens.*

Potatoes shaded by Indian Corn not diseased.—At Waltham Abbey, Essex, a person of the name of Wright has, growing, some fine Indian corn; it is now 11½ feet high, and the distance between the rows induced him to plant Carrots and Potatoes, both of which are remarkably fine and free from disease; but further on he continued the same Potatoes, where there is no corn, and these are diseased and bad. Does this not prove that the influence of our late scorching sun must be the cause of failure?—*Waltham.*

Gardeners' Advertisements.—I presume that the persons who advertise for places wish to obtain them. May I enquire of them whether they seriously expect gentlemen to trouble themselves about writing to them, when they invariably avoid stating the wages they demand? I am employed to find two or three gardeners, and upon looking over your advertising columns I do not find a single advertisement that I can answer.—*G.* [We wish very much that gardeners would for their own sake attend to this hint.]

Soot a Preventive of the Potato Disease.—Last year, in November, I planted some seedling Ash-leaved Kidney Potatoes upon a gravelly soil. Trenches were made about 7 inches deep, and the tubers were planted, whole, in them, and a liberal quantity of soot was thrown over. I commenced lifting them in the latter end of July, and finished on the 1st of August, when I found the sets were encased in soot, and nearly all as sound as when planted. The tops were a little attacked with the disease, but the tubers appeared sound and a good crop. I placed them, according to custom, upon a gravel walk in my garden to dry for planting, and in about three weeks I found them severely attacked with the disease. I had them sorted over and placed in an out-house with the doors left open, and have continued to sort them over up to this day, and out of 10 bags I have three only left apparently sound.—*R. M. S., Sept. 29.*

Abies Douglasii at Dropmore.—The following are the height and dimensions of our best plant of *Abies Douglasii*:—Height, 48 feet 6 inches; diameter of branches, 38 feet 6 inches; girth of stem 3 feet from the ground, 4 feet. The seeds of this splendid tree were sown in March, 1828, and the tree was planted out in the following year on a very poor soil, with very little fresh earth added to it; or if this had been the case, the tree would have been still finer. On two or three occasions, two or three leaders have been formed, which I have removed; and the same happened this season in the shape of a second leader, which I have taken off. If removing contending leaders was more universally attended to, we should see much finer trunks to our finest timber-trees than are often to be met with. I have some seasons had excellent seed from *Douglasii*; but it is not to be depended on. There are but few cones this year, and the seeds are mostly abortive. When I sent the height of the *Araucaria imbricata* (see p. 479), it was 22 feet 6 inches: it is now 23 feet 3 inches, and will be several inches higher before winter, as the tree is growing very fast.—*Philip Frost, Dropmore.*

Solanum laciniatum affected by Potato Disease.—You mention that you are not aware of the Potato disease having attacked any other of the Nightshade family except the Tomato and Egg-plant. To these I can add a third, the *Solanum laciniatum*, which was growing in great vigour and beauty in my nursery in the open air on Sunday the 25th of July, and its development was so singularly beautiful and perfect, that my sons with myself remained about it, examined it, and pronounced it one of the most interesting of its tribe, when grown from seed in the open air, as this plant was, and not confined to a pot as we usually see it. Between 10 and 11 the following morning, in passing the same plant, I observed a change had taken place, the whole of the plant on the south-west side appearing to droop. Upon closer examination, the branches with their membranous angles, as well as the leaves they bore, were blotched over with dull purple, and upon removing the epidermis the tissue was disorganised and discoloured, the walls of the cells were broken, and the watery matter they had contained was diffused. At this time I saw no symptom of mouldiness, but by two o'clock on the same day nearly the whole of the infected parts were covered with minute white hair-like fungi, that had pierced the outer integument, and whose rootlets had inserted themselves in all directions in the diseased matter. In a few days the peculiar havoc and brittle stage of the disease became apparent, and as a consequence no more fungi were nourished. That the disease was identical with that on the Potato there is not