

found in the golden rule of pruning, that more buds are to be left on the strong shoots, and less, in proportion, on the weak ones. Like Darwin's law of the survival of the fittest, you leave the strong plant long and cut away nearly all the weaker ones. The strong grower is capable of supplying several buds on each shoot with a sufficiency of sap for good blooms, and if a due number be not allowed the shoots will either not flower or will produce coarse and

ill shaped blooms. In proportion as a plant is weakly in growth, fewer buds should be left, because there will be only sufficient sap for one or two buds. The more a shoot is cut back the longer will be the new growth. To get rid of the insects that trouble rose bushes, they require to be sprayed in spring with a solution of whale oil soap, or handier, "sulpho-tobacco soap," and a first-rate thing is to turn the hose on and spray them well and frequently with cold water.

Establishing Lilies

R. B. WHYTE, OTTAWA, ONT.

Could Mr. Whyte, whose garden was described in the March Horticulturist, tell me about establishing lilies. I know many amateur growers have failed. Of the last lot I got from Vermont none grew. I never have succeeded in establishing even one lily and would be glad if I could.—(Mrs. Rudolf, Seaford, Ont.)

Lilies succeed best when planted in a well drained, sandy loam, with a gravel or sand subsoil. As they should be planted deep there should be at least 12 inches of good fertile earth above the subsoil. Many growers fail from planting too shallow. The small bulb varieties like *Tennifolium*, *Martagon* and *Superbum*, should be planted about six inches deep, while the larger bulb sorts, like *Croceum*, *Auratum*, *Excelsum*, *Longiflorum*, etc., should have not less than 10 inches from the top of the bulb to the surface.

Lilies should be heavily mulched during the winter. As soon as the ground freezes cover with three or four inches of rotted stable manure, and over that six or eight inches of straw or light manure. Even with the greatest care many of the most beautiful forms do not become established. The *Auratum*s, *Brownii*, *Longiflorum*, *Krameri*, *Lennifolium*, *Pardalinum*, and sometimes the *Speciosum*s die out after two to four years' blooming and have to be replanted, but there is a long list of varieties that are perfectly hardy and easily grown if properly treated, including *Proceum*, *Martagon* (pur-

ple and white), *Superbum*, *Candidum*, *Tigrinum*, *Excelsum*, *Hansonii*, all the elegant varieties, of which *Citrinum*, *Incomparable* and *Houtti* are the best, all the *Umbellatum*s, the best of this class I have grown are *Tottenhami*, *Sensation*, *Grandiflorum* and *Aurantiacum*. A very beautiful and hardy lily is *Pomponium Verum*, the most brilliant red in the family, but unfortunately the odor is very offensive.

Growing Sweet Peas Continuously

PROF. H. L. HUTT, ONT. AGRI. COLLEGE.

What fertilizer should be used to permit the growing of sweet peas in the same ground year after year. The ground is loam above with clay one and a half feet below?—(G. T. Clarkson, Toronto.)

It is best, if at all possible, to avoid growing sweet peas year after year on the same ground. Where attempted not only the growth of the vines but the quality of the flowers deteriorates. If the ground is so small that the location cannot be changed it might be advisable to change the soil by digging up a trench one and a half feet deep and about two feet wide and filling in with good fresh soil, which might be obtained from some other part of the garden.

The best soil for sweet peas is a good heavy loam with a fair mixture of clay. It should be enriched with a general fertilizer, such as well rotted manure, or if this is not obtainable, it would be well to apply a small quantity of some complete fertilizer, that is