pot them up into 3 or 4in. pots. A good potting mixture is one consisting of 7 parts by bulk of loam, 3 parts of peat or leaf mould, and 2 parts of sharp sand, with 1½oz. of dried blood, 1½oz. of superphosphate, ½oz. of muriate of potash, and ¾oz. of carbonate of lime added to each bushel of the mixture. The pots should be well crocked and well filled with soil, for the small plants soon grow through them. The soil level should be no more than ½in. from the rim of the pot. After a couple of days in the greenhouse to allow the plants to recover from the potting they should be placed out in a cold frame where they have a better chance of remaining cool during summer.

As soon as the small pots become filled with roots the plants should be potted on to 6 or 7in. pots according to their vigour. The same soil mixture as for the original potting should be used, and after being potted on the plants should be returned to the cold frame and allowed to remain there until colder weather approaches. At the first sign of frost the plants should be taken into the greenhouse and given adequate space for full development. Some provision should be made for shading them from strong, direct sunlight and the temperature of the greenhouse should be kept as low as possible without its being reduced to less than 40 degrees F. by night. If the plants are required for display at an early date, 50 to 55 degrees is the best temperature range in which to grow them.

All that is required of the gardener from then on is attention to watering and picking the plants over occasionally to remove dead or unhealthy leaves.

Especially when the plants have been grown rapidly, it may be found necessary to feed them as they approach the flowering stage, and weak liquid manure is satisfactory for the purpose. It can be prepared by suspending a bag containing a few pounds of animal manure in a drum of water. This "feed" should be used only when the plants obviously need supplementary food, such as when the roots are growing vigorously through the drainage hole at the bottom of the pot, or when the leaves are yellowing slightly as a result of starvation. Overfeeding does more harm than good. Before the liquid manure is applied it is wise to water the plants thoroughly, as damage is often caused by applying the "feed" to a dry soil.

Cinerarias for the Borders

The early procedure in raising cinerarias for the borders is the same as that in raising them for the greenhouse. The seeds are sown during October, November, or December and pricked out in the same manner. However, when the leaves of the plants touch each other the plants are not potted up. The boxes are placed in a cold frame or some other sheltered spot for a brief period and the plants gradually hardened off until they are able to stand normal atmospheric conditions. At any time after they have reached this stage they may be planted out in the borders, preferably in a moderately frost-free position.

Enemies of Cinerarias

The most common enemy of cinerarias in New Zealand is the "woolly-bear" caterpillar, the larva of the magpie moth. This pest is a voracious feeder and has a partiality for such weeds as groundsel and ragwort; in fact, it was introduced into the country some years ago with the aim of destroying ragwort. Complete control of such weeds greatly increases the chance of freedom from the depredations of the caterpillar. A sprinkling of derris dust over the plants at intervals keeps the larvae at bay.

Greenflies (aphides) do great injury to cinerarias by puncturing cells of the stems and leaves and sucking the sap. Spraying with nicotine sulphate at the rate of 1 part in 800 of water (½ fl. oz. to 2 gallons of water) gives satisfactory control if repeated at 10-day intervals until all trace of the pest has disappeared. To each 2 gallons of this mixture should be added 1oz. of soft soap or 3 fl. oz. of summer spraying oil.

The leaf-miner maggot also attacks cinerarias. The fly lays its eggs on the leaf and when they hatch the maggots burrow into the leaf and devour the tissue between the upper and lower epidermes. The best means of control are the eradication of weeds such as groundsel and thistles, which it also attacks, and crushing the maggots inside the leaves whenever they or their tracks are noticed. The maggots are about ¼in. long. Dusting leaves with derris tends to prevent the flies from laying their eggs.

Garden Work for December

Annuals from late sowings should be finally thinned. The hoe cannot be put to much good use in flower borders, so most of the weeding must be done by hand. Only the tallest and most vigorous types of annuals should need staking. Only by continual removal of all dead flowers and developing seed pods can a continuous display of flowers from annuals be guaranteed.

Bearded irises have horizontal fleshy stems or rhizomes, which develop along the surface of the soil and soon overcrowd each other. For good displays and healthy plants these irises should be lifted and divided every 2 or 3 years. It is possible to lift and divide them immediately after they have ceased flowering; in fact, under New Zealand conditions, this appears to be the best time for the operation. Bearded irises thrive in a rich, well-drained soil and appreciate an annual dressing of 2oz. of superphosphate and 2oz. of carbonate of lime to each square yard of bed.

Begonias of the tuberous-rooted type growing in pots should be coming into flower and, if necessary, they should be fed with weak liquid manure. Feeding after the main flowering period has been reached tends to induce weak, useless growth. Laterals (unwanted side shoots) can still be removed to be used as cuttings. The small side flowers (females) should be removed, as they are of little value

Herbaceous plants such as delphiniums, lupins, and doronicums should have all faded flowers removed now in the early districts. In this way a further display of blooms is often obtained in late autumn.