

SMALL-FRUIT.

In many small-fruit sections the plants are stunted and poor; a great improvement would be shown if a dressing of the more soluble chemical fertilizers were given now. Usually this includes superphosphate, sulphate of ammonia, and sulphate of potash. The mixture should be broadcast between the rows and scarified in.

Cape gooseberries may be planted out now. Results will largely depend on the preparation given to the land. A good spacing is 3 ft. between the plants and 6 ft. between the rows.

THE FLOWER-GARDEN.

It is now time to plant out the half-hardy annuals, dahlia and chrysanthemum plants. The violet-beds will benefit and give a much better crop of blossom next season if a good dressing of chemical fertilizer is applied now. The foliage of many kinds of bulbous plants is inclined to be in the way and look untidy, but it should be carefully preserved. The plants are setting the flower-buds for next season, and should have every attention.

The proper use of chemical fertilizers is the secret of success in modern gardens. The soluble kinds make the feeding of plants with liquid manure an easy matter, but the application must be properly timed. For the different qualities and effects of the principal chemical fertilizers, see the article in the *Journal* for June last. An amount of 1 oz. to the square yard represents 3 cwt per acre.

Lawns and Lawn-mowers.

Grass lawns require regular trimming now to keep them in order. The work is often unsatisfactory owing to the mower being in bad order. It is either blunt or badly set. The principle on which the ordinary lawn-mower is made is that of a spindle of beaters revolving quickly on a fixed ground plate or knife. There are set-screws at each end of the spindle to enable one to adjust it to the fixed knife. The adjustment should be even, and sufficiently close to cut paper cleanly when placed between.

To sharpen the mower place it upside down on a bench and arrange the mechanism to enable the beaters to revolve the opposite way. By revolving the beaters in this way and wiping them occasionally with a mixture of emery-powder and oil they will quickly improve. Finish with knife-powder and oil to give a fine edge; then wipe them clean and reset the machine. Machines are made with facilities for sharpening them in this way.

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CLASSIFICATION OF SOILS BY PLANT-FOOD PERCENTAGES.

The following tables, representing European practice, will assist readers in interpreting chemical analyses of soils as given, for instance, in the article "Some Soils of Otago Peninsula" printed elsewhere in this issue.

Maercker's Rating (Hydrochloric-acid Extract).

Grade of Soil.			Total Phosphoric Acid.	Total Nitrogen.
Poor	..	..	.. Below 0.05	Below 0.05
Medium	..	..	.. 0.05-0.10	0.05-0.10
Normal	..	..	.. 0.10-0.15	0.10-0.15
Good	..	..	.. 0.15-0.25	0.15-0.25
Rich	..	..	.. Above 0.25	Above 0.25

Rating adopted for Available Plant-food (Citric-acid Extract), as determined by B. Dyer's Method.

Grade of Soil.			Potash.	Phosphoric Acid.
Deficient	..	..	.. Below 0.005	Below 0.01
Normal	..	..	.. 0.005-0.01	0.01-0.015
Good	..	..	.. Above 0.01	Above 0.015