

quantities, the amount of manufactured fertilisers applied can be less than would otherwise be the case. For general purposes in the home garden a base mixture consisting of nitrogen and phosphate is usually sufficient, but a light and occasional application of potash also will probably be beneficial. The base mixture is best applied to the garden plot during soil preparation before sowing or planting.

A suitable mixture for general purposes can consist of 3lb. of nitrogen, 5lb. of phosphoric acid, and 3lb. of potash. By mixing 7lb. of sulphate of ammonia, 21lb. of blood and bone, 14lb. of superphosphate, and 6lb. of sulphate of potash this ratio will be achieved; 1 to 2lb. of this mixture can be applied as a base to each 10 sq. yds. of garden and worked in before sowing or planting. Any of the mixture remaining is handy for applying to individual crops during the growing season.

Side Dressings

Application of fertilisers during the growing season is chiefly governed by the growth of the plants concerned. Individual fertilisers and not complete mixtures are often all that is necessary; this applies particularly to the leafy crops such as cabbage, spinach, silver beet, and lettuce. A few of the more common fertilisers and recommended amounts to apply as side or single dressings are as follows:—

Sulphate of ammonia supplies nitrogen and is soluble in water. It should



[Sparrow Industrial Pictures Ltd. photo.]

Band application of base fertiliser is more economical than broadcast application.

be used at the rate of ½ to ¾oz. per square yard (1 sq. yd. is equal to 9 running feet of row 12in. wide). Sulphate of ammonia is valuable as a fairly quick-acting nitrogenous fertiliser for all leafy crops during the growing period. Its application to cabbages at the half-grown stage assists hearting. If the fertiliser is used from the seedling stage, several applications at 2- or 3-weekly intervals might be necessary. Liquid manure can be made by dissolving ½ to 1oz. in 2 gallons of water.

Nitrate of soda is soluble in water and is the quickest acting of the

nitrogenous fertilisers. It also is valuable for leafy crops, particularly in the cooler periods, when it can be used directly without having to be converted by soil bacteria. As it goes directly into solution, it should be applied to actively growing crops only; otherwise its full value might be lost. Liquid manure can be made in the same way as with sulphate of ammonia.

Dried blood contains nitrogen in an insoluble form and requires to be broken down by bacteria before it becomes available to plants. It is considered a safe fertiliser, as it becomes available slowly. For this reason it can be applied to most crops where nitrogen is needed at up to ½lb. per square yard.

Blood and bone contains both nitrogen and phosphoric acid, both insoluble in water. Like dried blood it is organic and safe to apply to most crops at 2 to 4oz. per square yard. Organics should not be applied directly to root crops such as carrots in too liberal amounts.

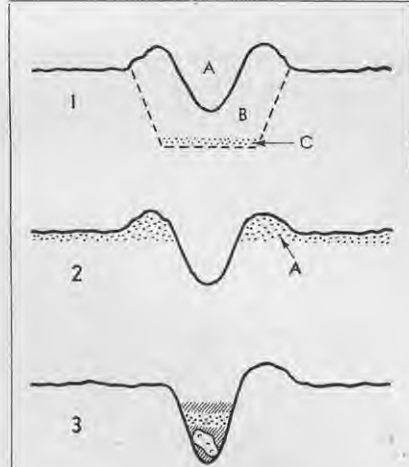
Phosphatic fertilisers such as superphosphate and the bone preparations generally become available slowly. They are valuable for root crops especially and can be applied at 1 to 3oz. per square yard.

Sulphate of potash should be used sparingly and best results are obtained when it is applied early. Its full value is not secured when it is used as a side dressing and it is therefore best applied in the base mixture. On most soils applications of up to 1oz. per square yard should be sufficient.

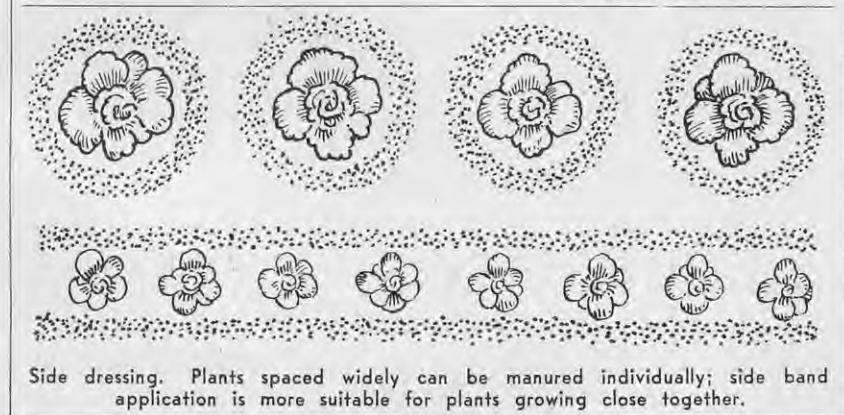
Muriate of potash can be applied at the same rate as sulphate of potash, but owing to its salt content it is best not to use it at heavy rates or continuously on all crops.

Applying Fertilisers

The most effective method of applying fertilisers has been the subject of research and trial for many years and various methods are still adopted in commercial practice. Under home



At left—Distribution of fertiliser in three forms of band application. 1—Position of fertiliser in trench later filled and where the seed drill is drawn above the fertiliser level. A: Seed drill. B: Original trench. C: Fertiliser at bottom of original drill. 2—Surface application and fertiliser worked into surface before seed drill is drawn. A: Fertiliser incorporated in upper soil layer. 3—Potatoes can be covered with a light layer of soil, the fertiliser applied, and the remainder of the trench filled in.



Side dressing. Plants spaced widely can be manured individually; side band application is more suitable for plants growing close together.