

the air. As a result of this, soil inoculation is often resorted to. This simply consists of taking soil where these plants are found to grow luxuriantly, and have an abundance of the tubercles above referred to, and sowing the same on a new area, a few handfuls of soil often sufficing for an acre of ground. The exact physiological process gone through with by plants in securing this free nitrogen is not definitely known.

Phosphorus.—Phosphoric acid is applied to the soil as a direct fertilizer in the form of superphosphates, bone compounds, etc. Dissolved South Carolina rock is a common commercial form of this manure. Usually, however, if soils are well cared for this element will not be lacking.

Potash.—Potash may be secured in the form of muriate of potash, which is probably the most reliable. Kainit or German potash salts and wood ashes are other forms of this commercial fertilizer, for the bearing orchard at least. Five hundred to seven hundred pounds of muriate of potash, or

forty or fifty bushels of wood ashes, is a dressing per acre for orchards.

The following formula is suggested :

Ground bone	100 pounds.
Acid phosphate.....	100 pounds.
Muriate of potash	100 pounds.
Nitrate of soda.....	125 pounds.

This amount per acre applied in the spring-time and either plowed under or disced into the soil will be found sufficient for those orchards bearing annual crops of fruit. The above formula, however, should be supplemented by special fertilizers or otherwise varied to suit any particular orchard whose soil conditions are peculiar to itself.

It should be understood that this discussion does not encourage the use of commercial fertilizers. There are instances, however, where these must be resorted to. Orchardists should largely confine themselves to cultivation and green manuring for supplying the necessary plant foods.—From Bulletin 55, Illinois Agric'l Exp'l S.

RULES FOR JUDGING FRUITS, WITH A SCALE OF POINTS.

GENERAL RULES.

1st. In all cases the judges are to be governed by the letter and spirit of the schedule under which exhibitors have made their entries, the general appearance of the fruit, care in its selection, and taste displayed in arrangement or grouping, each entry being distinctly separate from the rest. These are all elements of the highest importance, and should receive appropriate consideration by the committee.

2nd. In every group, whether the single plates, threes, fives, tens or larger collections of fruit, there should never be more than one plate of any variety in any one group. List of names of varieties contributed shall accompany each group, and must

be attached to the entry card, and have a corresponding number and designation, with or without exhibitor's name, according to rule.

3rd. The same plates of fruit cannot compete for different prizes, though the several entries for the best ten, five or other numbers, and the best plate, may embrace the same varieties, but not the same plates of specimens ; in each case they must be duplicates, and in sweepstakes they will count a single variety.

4th. When the schedule prescribes the number of each kind, usually three or five, to be placed on exhibition, not less than the exact number must be presented.

5th. In general collections of fruits by