

plied with Bordeaux mixture. The Paris green, if applied in moderate quantity and evenly distributed, is not injurious to foliage when used with lime water or Bordeaux mixture. Rows treated with Bordeaux alone out-yielded those treated with arsenite of soda in Bordeaux by 34 bushels per acre. This suggests that, perhaps, the soda arsenite may do damage to the crop though not showing any effect on the foliage. The use of arsenite of soda and lime is attended by considerable risk. The part which copper sulphate and lime plays in spray mixtures is plainly given. Those interested in spraying should write for this bulletin.

#### QUALITY TESTS.

"Quality in Potatoes" is discussed in Bulletin 230, Cornell University. It is pointed out that the quality depends on the amount of water, the amount of starch, and the richness of the potato in nitrogenous matter. After careful investigation it was considered that the quality and mealiness of a potato when boiled depended on the daily

range of soil and atmospheric temperature during the growing period, on the degree of ripeness of the tuber when the plant dies, and on the physical condition and type of the soil. Since tubers grow at regular nodes on the stem above the planted tuber it is recommended that planting be five or six inches deep in good soil so that enough nodes may be formed to accommodate the tubers which the plant is capable of bearing. If planted deeper than six inches moisture and temperature conditions are unsuitable for tuber development at the lower nodes and the result is small and scabby potatoes. If planted shallower than three inches the variation in temperature and moisture is too great for proper development. The result is small, compound and sunburnt potatoes. Long tubers which grow sloping in the ground show a difference in quality in the different halves. The desirable conditions, 65 to 75 degrees temperature and uniform moisture, are most nearly approached at a depth of two to six inches, and it is there that the best tubers are found.

## WINTERING THE CUCERBITS

**S**PECIAL care in handling is necessary if the gardener wishes to have success when storing squashes, pumpkins, melons and such crops. Little handling should be given before the skin has become thoroughly hardened. They are injured by very slight frost, although the injury may not be apparent for some time. Those who have had experience in harvesting and storing these crops recommend that they be pulled before frost comes and put in piles in the field. There they can be left exposed to the sun by day, but should be covered at night to prevent injury from frost. In case a stem is broken off rot soon develops. For this reason it is recommended that the stems be cut off to not more than

one inch long when harvesting so that they cannot be used as handles when loading them on wagons. When hauling them to the storehouse they should be placed on a bed of hay or straw to prevent bruising.

The best storage is dry atmosphere and cool temperature, although they keep for a considerable time if the temperature is comparatively high. Authorities recommend placing them on shelves one tier deep.

"I always aim to have the squash harvested before frost comes," said Mr. T. W. Stephens, of Aurora, to *The Horticulturist* recently. "They should be off the vines in early October to escape early frosts. They must be kept dry and cool, but never frozen. I always put them in a dry shed