

as follows: Carbon dioxide,  $\text{CO}_2$ ; nitrate of soda,  $\text{NaNO}_3$ ; limestone,  $\text{CaCO}_3$ ; bluestone, or copper sulfate,  $\text{CuSO}_4$ ; sulfuric acid,  $\text{H}_2\text{SO}_4$ ; hydrochloric acid,  $\text{HCl}$ ; common salt  $\text{NaCl}$ .

**Chemical Terms Defined.**—For a more complete appreciation of the subject of chemistry, particularly writings on the subject, it is necessary to have quite clearly in mind what is meant by the various special terms that are commonly used. A few of these terms and their simple definitions are given here. The order in which they are given is without reference to their relative importance.

**Analysis.**—The determination of the composition of a substance. This is called qualitative analysis. If the proportions of the parts that make up the substances are determined the analysis is called quantitative analysis.

**Synthesis.**—Unlike analysis, which is really a tearing apart, synthesis is a building up. A synthetic compound is one that is artificially made from simpler parts or substances.

**Effervescence.**—When vinegar comes in contact with soda, gas bubbles up from the mixture. This bubbling is called effervescence. The gas in this case just cited is carbon dioxide, one of the most common gases occurring in nature.

**Solvent.**—Anything that dissolves another substance or compound—that is, puts it into solution or in liquid form—is called a solvent. Water is the greatest known solvent.

**Reagent.**—Any chemical that is used to treat or mix with another chemical or substance is a reagent. The effect produced is called a reaction.

**Dehydrate.**—To remove the water from a substance, as in the process of drying fruits or vegetables.

**Anhydrous.**—Free from water. When the crystals of bluestone (copper sulfate), which naturally contain water, are heated to a sufficient degree they break down and turn white or a greenish white. The substance is then free from water and is called anhydrous copper sulfate. Lime free from water is called anhydrous lime or quicklime. When water is added it is called hydrated lime.

**Emulsion.**—A combination of one or more oils with water or a water solution of some substance.

**Precipitate.**—To cause to fall; for example, as water from the clouds in the form of rain or snow. When certain liquids are mixed together a solid substance is formed, which falls to the bottom of the vessel in which the mixing takes place. This substance is called a precipitate.

**Saponification.**—The reaction that takes place when lye and fat are boiled together in the making of soap.

---

## Supplies of Creeping Bent Stolons for Vegetative Planting

The indications are that supplies of bent stolons will be available from commercial sources for planting in June, 1923. Nurseries of these stolons planted in midsummer and given careful attention should be in excellent condition to go through the winter.