



### Standardized Plant Names

**S**UPPOSE you have decided you'd like to have some bluebells in your garden this year. You call up your seed dealer or nurseryman and order the requisite number of plants. That is, you do it if you're a confiding soul.

For there are at least three genera of plants that share the name, bluebell, in loose common usage. There are the American bluebells, known also as lungworts, known to botanists as species of *Mertensia*. There is the bluebell of Scotland, which is a *Campanula*. And the name is sometimes misapplied to the grape hyacinth, whose technical name is *Muscari*. How are you and your dealer to reach a common basis?

Fortunately, there is an arbiter. It is

a one-volume cyclopedia entitled *Standardized Plant Names*, prepared for the American Joint Committee on Horticultural Nomenclature by its editorial committee. The second edition, just published, contains more than 90,000 standard common and scientific plant names.

For gardeners and other persons making use of applied botany, the bluebell question is settled in favor of the American wild bluebells, the *Mertensias*. Sixteen species of these are listed. If you want the bluebell of Scotland, it is best to order it as such. Similar resolutions of other horticultural dilemmas are offered.

There are, in addition to authoritative listings of the scores or even hundreds of recognized horticultural varieties of such

plants as roses, peonies, irises, etc., some special sections of particular interest. Thus, under Lumber Trade Names, you can determine just what tree species you are supposed to get a cut of, when you order such wood as Mexican mahogany or Fiji sandalwood. Or, if you are Borgiaminded, you can learn the botanical kinships of Socrates' hemlock, black nightshade and the deathcup mushroom from the section on Poisonous Plants.

Of more than passing interest is the introduction of a special symbol to indicate plants of importance in the wild, as food sources for game and song birds, mammals and fish.

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### BIOCHEMISTRY

## Analysis of Life Essence Is Now Made Possible

**L**ARGE SCALE chemical analysis of the nucleoproteins, which might without exaggeration be called the essence of life itself, has been made possible through a simple method of extracting them from living cells with a strong salt solution, Drs. A. W. Pollister and A. E. Mirsky, of Columbia University and the hospital of the Rockefeller Institute for Medical Research, revealed at the recent meet-

ing of the Genetics Society of America.

Nucleoproteins are what the nuclei of cells are made of, and since nuclei are at once the directors of physiological activities of the cells and the containers of the genes that determine the course of heredity, the importance of a better knowledge of their chemistry is obvious. Until now, however, it has been extremely difficult to obtain sufficient quantities of these substances to make satisfactory analyses.

Drs. Pollister and Mirsky stated: "We have found that when fresh spermatozoa or fresh cells of such organs as thymus, liver, kidney, or pancreas are soaked in a strong salt solution (5.8% sodium chloride) the nucleoprotein goes into solution in considerable amounts—adequate for very complete analyses.

"Microscopic examination of the cells after soaking shows that the nuclei, which are usually full of chromatin, are now empty—a direct demonstration, for the first time, that the extracted nucleoprotein comes from the chromatin. By this method we shall now be able to extract and to analyze the nucleoproteins from many types of cells.

"By comparing these nucleoproteins we shall be able to discover what chemical changes occur in the chromatin when, in development, embryonic cells become the specialized tissue cells such as those of glands, blood, muscle, brain, etc. This may bring us much nearer to an understanding of exactly how the genes in the chromosomes operate in development.

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