leaf-curl group described by Holmes<sup>1</sup> as the family Rugaceae with the one genus, Ruga. Holmes has placed the curly-top virus in the yellows group, the family *Chlorogenaceae*, and in the single genus, *Chlorogenus*, but the symptoms induced by the curly-top virus have little in common with those used to describe the family *Chlorogenaceae*.

The specific epithet, *eutetticola*, is in error from an orthographic viewpoint because the proper root for the first member should have been *eutettig*-. The specific epithet should, therefore, be changed. Changing the specific epithet affords the opportunity to choose a term that characterizes the curly-top virus and is not out of accord with present knowledge. The specific epithet, *eutetticola*, was assigned by Holmes to the curly-top virus when no other vector was known except the beet leafhopper, *Eutettix tenellus* (Baker). It is now known that this leafhopper failed to transmit the variety of the curly-top virus that occurs in Argentina. Another vector, *Agalliana ensigera* Oman, serves as vector there.

Because the curly-top virus causes in sugar beet and other host plants arrested development of invaded tissues, leaf curl, enations and other deformities rather than the symptoms used to describe the genus *Chloro*genus, we propose that the curly-top virus be shifted to the genus *Ruga*. And, in view of the fact that the virus causes rough, pointed enations on the veins and rough distortion of the leaves and also in view of its vector relationships, we propose that its specific epithet be changed to verrucosans, to mean causing rough swellings. The name of the curly-top virus then will be *Ruga verrucosans*.

Detailed studies on the Argentine curly top will be published later in a more extensive paper.

> Eubanks Carsner C. W. Bennett

DIVISION OF SUGAR PLANT INVESTIGATIONS, U. S. DEPARTMENT OF AGRICULTURE,

RIVERSIDE, CALIF.

## THE PREPARATION OF SODIUM IODOACETATE

In a recent issue of SCIENCE<sup>1</sup> there appeared a request for sodium iodoacetate in the section devoted to "Rare Chemicals." It is difficult to obtain this reagent in pure form by the procedure customarily employed.<sup>2</sup> The present note describes a simple method for preparing pure sodium iodoacetate in good yield from monochloroacetic acid.

Monochloroacetic acid (10 gm) is dissolved in pure

<sup>1</sup> F. O. Holmes, "Handbook of Phytopathogenic Viruses." Burgess Publishing Company, Minneapolis, 1939. <sup>1</sup> SCIENCE, 97: 304, 1943.

<sup>2</sup> W. A. Drushel and G. S. Simpson, Jour. Am. Chem. Soc., 39: 2453, 1917.

dry acetone (150 ml) containing sodium iodide (24 gm). The solution turns brown and separation of sodium chloride begins almost immediately. The reaction is complete in 6 to 8 hours at room temperature. The sodium chloride is removed by filtration through sintered glass and washed with a little acetone. The combined filtrates are adjusted to pH 6.8, using 40 per cent. sodium hydroxide. The precipitate which separates is filtered and washed with acetone, with chilled absolute alcohol and finally with dry ether. The product is powdered and dried *in vacuo*. It is quite colorless and free from halide ion. Yield: 20 gm (91 per cent.).

LEON GOLDBERG

SOUTH AFRICAN INSTITUTE FOR MEDICAL RESEARCH, JOHANNESBURG

## **ISOTEL, ISOTELIC**

It is surprising that no one has previously suggested (so far as the writer is aware) the use of the term *isotelic* (Gr. isos = same; telos = purpose) to designate the relationship between entities which have the same purpose.

The familiar term *isomer* (pl. isomers) is used in chemistry to designate compounds made up of the same parts (Gr. isos = same; meros = part). In an exactly analogous way it seems logical and convenient to designate compounds which perform the same function as *isotels* (Gr. isos = same; telos = purpose).

In biochemistry the need for such terms appears real in view of the fact that numerous cases can be eited of distinct chemical compounds which can replace one another, for example, in the diet. Thus there are numerous *isotelic* forms (*isotels*) of vitamin D as well as other vitamin *isotels* (including biotin *isotels*).<sup>1</sup> In animal nutrition methionine and choline may be said to be partially *isotelic*. In yeast nutrition  $\beta$ -alanine and pantothenic acid may be said to be *isotelic*, since one may replace the other in nutrient media.

The term vitamer has been suggested<sup>1</sup> to designate vitamin forms which can replace one another. This term was obviously suggested also by the word isomer. Unfortunately, however, the wrong portion of the word isomer was used and as a result vitamer, aside from having a mixed Latin and Greek origin, has a definite but false etymology, meaning, life-part. This is meaningless so far as the proposed use of the term is concerned.

## ROGER J. WILLIAMS

THE UNIVERSITY OF TEXAS, BIOCHEMICAL INSTITUTE, AND CLAYTON FOUNDATION FOR RESEARCH, AUSTIN

<sup>1</sup> D. Burk and R. J. Winzler, SCIENCE, 97: 2507, 57-60, January 15, 1943.