measured with the aid of a projection microscope and a planimeter.

In plants deprived of calcium, the length of stem is less than that of plants grown in the presence of calcium; the lower leaves are chlorotic, and the upper leaves are curled and tough. Plants grown without calcium for five weeks and then with a complete nutrient solution for five subsequent weeks show a rapid recovery and assume a normal appearance, while those plants starved of calcium for this entire period die at the end of nine or ten weeks.

Both the green and dry weight of the plant decrease as the amount of calcium is decreased in the nutrient solution. Chemical analyses of roots and of stems indicate that the calcium stored in the seed is used for early growth, since the amount of calcium oxide, calculated as percentage of green weight, or as percentage of dry weight, is slightly larger in the plant starved of calcium than it is in the plant given the complete nutrient solution. As is to be expected, the total amount of calcium, calculated as calcium oxide, is slightly greater in the plants given the complete nutrient solution than it is in a similar number of plants starved of calcium.

Whether the plants are grown under the usual garden conditions, in a nutrient solution with the full quantity of calcium, or in a solution lacking calcium, the anatomical structure of the stem and of the root remains constant, or the variation is so slight as to be insignificant. The difference is in the amount of elongation rather than in the anatomical structures. Further data and a detailed explanation of these conclusions will appear at a later date.

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THERMAL CONDUCTIVITY OF GLASSES TRANSMITTING ULTRA-VIOLET LIGHT

INCREASED knowledge of the beneficial therapeutic effects of ultra-violet light upon living organisms has in recent years led to the development of a number of glasses which transmit ultra-violet light more or less completely. It is evident that if any of them are to replace the window-glass now being used they must be very poor conductors of heat, for otherwise man might pay dearly for the benefits secured by the use of these glasses because of the greater amount of heat they would allow to escape from a room by conduction.

The thermal conductivity for a number of these glasses has been determined at the Iowa State College by Christiansen's method. It was found that for every glass tested the thermal conductivity was less than for window-glass. By the use of some of these substitutes man would get ultra-violet radiations into the room and he would also lose less energy by heat conductivity through them.

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CACOEPISTIC SCIENTIFIC TERMS

I HAVE been much interested in the views that have been published lately in SCIENCE regarding the correct pronunciation of the word *research*. The art of uttering *research* with propriety is of concern to us, because the word is so very frequently used in Mellon Institute. We have always given preference to pronouncing it "rē-serch'." I have also noted the correspondence respecting the number of the word *data*. It is regrettable that some scientific writers do not regard it as plural, thereby failing to observe grammatical principles. It should be borne in mind that the singular form *datum* is a useful word that has a fixed place in scientific and technical reporting.

In this communication I wish to point out errors that are commonly made in pronouncing certain widely used chemical and medical terms. The standard of the pronunciation of scientists and professional men is all too frequently the authority of their own specialty teachers and not always the present usage of literary society and lexicography. Professional phonology, in part at least, is thus sometimes the product of fancy rather than of precise scientific practice based upon the principles of grammar. Every profession should have a sound, fully accepted orthoëpy for its specific terms.

Most pharmacists and many pharmaceutical chemists and physicians mispronounce the word *citrate* (sit'rāt) as "sī'trāt," notwithstanding the fact that, in general, they inconsistently but correctly pronounce *citric* as "sit'rik." Likewise they pronounce *salicylate* "sal'is-il-āt," instead of sal'i-sil-āt, the preferred chemical and lexicographic pronunciation. Recently we have heard a number of different chemists mispronounce *chemotherapy* (kem-o-ther'ap-e) as "kē"-mo-ther'ap-e"; this cacoëpy appears to be especially popular among manufacturing pharmacists who are featuring the use of the word in their sales promotion activities.

The following are among the other ordinary chemical terms that are often pronounced incorrectly: *acetate* ("ā-se-tāt" for as'et-āt), *amino* ("a-mi-no" instead of the lexicographically preferred am'in-o), *cyanamid* ("si-a-nam-id" for si-an'am-id), *hemoglobin* ("hē-mo-glo'bin" for hem-o-glo'bin), *methane* ("mē-thān" instead of meth'ān), *piperidin* ("pip-er-i'din" for pi-per'id-in), *ptomain* ("tō'mān" instead of tō'ma-in), *purin* ("pūr-in" for pu'rin), *saligenin*