

The Species Question

Botany

DEANE B. SWINGLE, in *A Text-book of Systematic Botany* (McGraw-Hill):

One taking an impartial view of the species question is forced to this conclusion: that for most of the plant kingdom the bold Linnæan type of species is simpler than the finely divided elementary species, and serves every essential purpose; but in certain groups it is necessary to make finer distinctions for research reference, though even there the majority of botanists may not need to do so for their more general work. The natural answer is to assemble the individuals into relatively few, large, clear-cut species and where necessary have additional fine distinctions to be used only by those who have special need for them. Various terms have been used to designate these finer divisions, such as subspecies, varieties, races, types, and forms. It has been suggested by N. L. Britton that they be merely numbered rather than named and this plan has much in its favor. To be sure this introduces the trinomial nomenclature, but if this is cumbersome it has the advantage of showing relationship, for the specific name connects the subspecies to each other and the plan finds prece-

dent in the type numbers of certain pathogenic bacteria.

Varieties or races based on fine distinctions of a somewhat permanent character must not be confused with ecological or environmental forms of a temporary nature. It is well known that closely related individuals growing in different habitats may vary considerably, so much indeed that they are sometimes called different species. It would be desirable, though sometimes impracticable, to have representatives of related species grown side by side for comparison. Such a test would eliminate many superfluous specific names from our manuals. It would also involve, in some cases, the practice of including in the specific description qualifying statements concerning the effect of environment, and corresponding records showing the habitat of the specimen in question. The work now being done in this field by ecologists will greatly strengthen our taxonomic systems.

Generic distinctions, and those of higher categories, give much less trouble. To be sure there is some difference of opinion as to what categorical rating should be given to certain groups, *e. g.*, whether they should be considered orders or families, families or tribes, genera or subgenera. In fact, several families have been divided in recent years, and some would now call the legumes and the composites orders rather than families. These differences are not disturbing, however. Because of the absence of gradations in characters used in class, order, and family distinctions there is usually little difficulty in placing a plant correctly in these groups, and even generic classification is seldom troublesome.

Science News-Letter, July 28, 1928

Primordial Hunger

Evolution

P. D. GOG, in the *Chicago Post*:

If I were an ameba
And you were an euglena,
I would pursue you
For a thousand millimeters,
Until I caught you,
And embraced you,
And absorbed you,
And made you all my very own.
Thus would we two be one,
Living in our crystal drop of water
Until the seconds of our life had sped—
And I would die content.

Science News-Letter, July 28, 1928

BINDER COVERS

FOR

SCIENCE NEWS-LETTER

Many subscribers have expressed a desire for a convenient binder in which to file their copies of the Science News-Letter. We therefore have prepared an attractive and durable loose-leaf binder-cover of gray leather-like stock, printed in dark green and complete with fasteners. Each binder-cover will hold one volume (six months or 26 issues).

To facilitate punching the issues of the Science News-Letter to fit this binder-cover, a pattern showing where holes should be placed appears each week on the back cover page.

To obtain a binder-cover, send 20 cents in stamps (make them 2s, please), together with your name and address (please print) to

SCIENCE SERVICE

21st and B Sts.

Washington, D. C.

THE LIVING TEXTBOOK

Nothing will vitalize science teaching more than a close contact with the actual frontier of man's intellectual conquest of nature.

When earthquakes destroy, physicists probe, chemists create, archaeologists dig, biologists discover, or philosophers think, the results of their labors are reported in the

SCIENCE NEWS-LETTER

No better supplementary reading can be provided for pupils in general science, chemistry, physics, biology, or any other science.

Even the history of science is vitalized by the "Classics of Science" which give the details of epochal discoveries in science in the exact words of the great scientists.

Every student should be given his own copy of the Science News-Letter to clip, read and absorb.

Reduced subscription rates for class orders of 10 copies or more to the same address are only 5 cents a copy per week (only \$1.80 for the school year).

Enough samples for the entire class will be sent in September if you write now to:

Subscription Department

SCIENCE NEWS-LETTER

21st and B Sts.

Washington, D. C.