

cepts of biology are better taught thus. That is why exponents of a well-organized general biology course believe that it has advantages over separate courses in botany and zoology ("well-organized" or not), or over a combination of the two if there is not more integration than is usually attempted. The fourth category is not general biology at all, but a short course corresponding to the committee's recommendation. The committee has not recognized in practise what it does admit in theory, *viz.*, "that the same fundamental laws of life apply generally to all organisms." It is unfortunately true that most text-book writers have failed to produce a text-book built upon this underlying concept. Such writers are still bound by tradition and circumstance, most so-called general biology text-books being poorly integrated accumulations of botanical and zoological facts. One text that stands out as an example of what should be done on a wider scale (Plunkett's "Outlines of Modern Biology") remains one of the most widely praised but least used of the group.

Much of the force of the report lies in its reiteration of its central theme. This occurs again in Part II of the committee's report, worded, however, even more positively than before: "If there is objective evidence or sound subjective evidence that general biology courses have lasting value for the students, it has not been made available to this committee." I do not know what would constitute "sound subjective evidence"; I only know that I would hesitate to question the existence of evidence, objective or subjective, for the lasting value of any course for any students. Surely, some of the thousands of non-science students who listened to Professor Conklin's lectures in general biology at Princeton, but who went no further in biology, derived some lasting benefit. The record has been similar in other American colleges and universities, Stanford, Chicago, Yale, New York University, to name a few. I for one refuse to admit that this concept of a science of biology, introduced to America by an eminent Englishman nearly seventy years ago, should now be abandoned in the organization of introductory courses in biological science. We need more, rather than fewer, introductory courses in which there may emerge in the student's mind a concept of a unified science of life.

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A POISONOUS PEA CONTAMINATE

THE synonym "nightshade" is applied to the various species of the genus *Solanum*. Black nightshade, *S. nigrum* L., is one of the most cosmopolitan of the wild plants, extending over the entire globe. Yellow nightshade, *S. nigrum* var. *villosum* L., *S. villosum* Lam.

or *S. luteum* Mill., has been found in Europe but grows mostly in the United States. Cut-leaved or three-flowered nightshade, *S. triflorum* Nutt., is a native of the Great Plains and Rocky Mountain region of the United States. All three of these nightshades are found in the Inland Empire, a section covering eastern Washington, northern Idaho and extreme northeastern Oregon.

Nightshades have become of late a serious problem to the pea industry. Many canneries have had difficulty in separating the nightshade berries from the peas. Both mature at the same time and are approximately the same size. The Food and Drug Administration prohibits the sale of peas which are adulterated with nightshade berries. This act has been questioned, because some do not consider the berries toxic but actually look upon them as a food. Doubt as to the toxicity of the yellow and three-flowered nightshades is justified considering that very little or no scientific data have been published on this point. The black nightshade was shown to contain a poisonous substance, solanine, first by Desfosses in 1821. Ecological factors cause a great variation in solanine content of all plants containing it. No quantitative data have been published on the solanine content of these plants found growing in the Inland Empire.

Work in the laboratories of the School of Pharmacy, State College of Washington, which is in progress, has reached the point where the toxicity of *Solanum triflorum* can be definitely stated. Solanidine has been indicated by qualitative test in *S. nigrum* var. *villosum* and has been isolated from the fruit of *S. triflorum*. This indicates that these species of *Solanum* are toxic, but the data concerning the amount of the toxic substance present will have to wait until work in progress has been completed.

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MERCURY IN DRAIN PIPES

RECENTLY we had occasion to clean out the drain pipe of one of our laboratory sinks and found, among other things, about a quarter of a pound of mercury trapped in the drain elbow. This quantity probably represents several years' accumulation. I recollect having similar experiences in the past and suspect a similar condition exists in the drains of most of the scientific laboratories in the nation. Might I suggest the exploration of this possibility as a means of adding a significant quantity of this vital metal to our nation's stores?

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