P. nigricans Atkinson and Edgerton n. sp.

Forming narrow elongated spots on the pods, stems, leaves and bracts, spots oblique on the pods and from 2–5 mm. x 1–2 mm. Spots at first white or with a purple border, later black. Stroma of pseudoparenchymatous cells 6–9 μ in diameter, two to three cell layers in thickness. Basidia clavate to subcylindrical, 20–30 x 6–8 μ, 4–8-spored. Spores sessile, and basidia continuing to form new spores, at least in artificial culture. Spores pale pink in mass, oblong to subelliptical, hyaline, continuous, smooth, granular, straight or curved, 12–20 x 3–3.5 μ, usually becoming once septate on germination. Mycelium from the stroma penetrating the adjacent tissues. Parasitic on pods, stems, leaves and bracts of *Vicia sativa*.

Geo. F. Atkinson,
C. W. Edgerton
Botanical Department,
Cornell University

MARINE BIOLOGICAL ASSOCIATION OF SAN DIEGO[1]

General Statement.—The La Jolla park transfer matter, the sewer bond election and the building of the new boat have been the events during the past year of foremost moment to the general association. The story of these is so well known that for the purpose of this report they can be quickly despatched.

The legislation requisite in the opinion of the attorney general of the state, to enable the city to transfer its trusteeship of the park at La Jolla to the board of regents of the University of California, was secured without a lisp of opposition, so far as we know, early in the last session of the state legislature. Shortly after the enabling act became law the city council passed an ordinance providing for the transfer, under certain conditions, of the title to the park to the regents of the university, the conditions of the transfer having been first submitted to and approved by the attorney of the board of regents to insure that the trust might be accepted legally and consistently with the university's rules and policies.

[1] Extracts from the annual report, presented July 20, 1907, by Wm. E. Ritter, scientific director.

Meanwhile, by reason of enlarging ideas and plans in the minds of the station's foremost supporters, Miss Ellen B. Scripps and Mr. E. W. Scripps, the inadequacy in size of the little park for the future developments contemplated, became more and more apparent. The final step in the transaction between the city and the board of regents was consequently deferred pending another effort to secure a site of more ample size somewhere in the immediate vicinity of La Jolla, which vicinity all expert judgment appealed to unites in declaring must not be given up under any circumstances. The only piece of ground even approaching the desired size, and at the same time available, was found to be a pueblo lot of about 160 acres owned by the city. It is a great satisfaction to be able to report that the efforts to secure this land have advanced to such a point as to justify the expectation that within a month the association will be the possessor of a station site large enough to admit of the developments looked forward to.

There remains in this connection only the pleasant duty of acknowledging the association's obligations to the various agencies that have contributed to securing for the association what it has asked. It is difficult to imagine how any community could take up a purely non-commercial project like this more intelligently and heartily, and promote it more liberally, than the San Diego community has this biological one. Individual citizens, business houses and corporations, city officials, representatives of the city and county in the state legislature—everybody, in short, with whom we have come into relations has treated us even better than we expected to be treated, and that is saying a good deal.

Planning for the New Laboratory.—The plan suggested at the last annual meeting, held in September, 1906, that the first section of the new laboratory building be hurried to readiness for dedication in early September, 1907, came to the end of many another fond hope. Unquestionably real good would have resulted to the station could the scheme have been carried out. But unquestionably also the conditions that have prevented its realiza-

tion, viz., the campaign for a larger and better building site necessitated by enlarged ideas and purposes for the future of the station, are a far greater good than any sort of an earlier dedication could have been.

The Work of the Summer.—The paid staff for the season consists of thirteen, five of whom are full-fledged naturalists and eight are their assistants. In addition seven "accommodated" workers are at the laboratory.

Dr. J. F. McClendon, of Randolph-Macon College, Va., has been employed as resident naturalist for the coming year.

No one beyond the Rockies was asked to come to the station this summer. The reasons were several for setting aside this once this especially stimulating and profitable feature of the policy of the directorate. When it became obvious that the little green laboratory building would have to do for the summer's work, consideration of the sardine-like condition of things that would be inevitable among the workers, strongly disfavored the alluring of strangers into the pack. Again, uncertainty as to whether the new boat would be in operation for any part of the season argued in favor of restricting operations to tasks already in hand which could be prosecuted to best advantage with the limited means for collecting that might have to be relied upon. Finally the probability that any naturalists we should care to ask would wish to attend the International Zoological Congress which met in Boston, August 19–23, did not favor an appeal to easterners.

Testing of Policy.—The policy of compensating professional naturalists for carrying on a scheme of investigation definitely undertaken by a marine biological station as a whole is an experiment until now untried, so far as I know. The plan is in its fifth year of testing here at the San Diego station. This period should be sufficient to give some intimation of its feasibility and productiveness. Fathers and mothers are not the most reliable judges of the virtues of their own children. It would be unprofitable for us of this association who have undertaken the experiment to indulge now, in the absence of anybody to criticize, in commendatory remarks on what has been accomplished. It will be enough to look for a moment at the balance sheet of outgo and results.

From 1903, our first year under the present order, up to this summer's work approximately $6,000 have been paid in salaries to naturalists and their assistants.

The product of this outlay stated numerically in terms of the printer's art is as follows: Twenty-three memoirs, aggregating 768 pages of the zoological publications of the University of California, large octavo in size, have been published. The manuscripts of two other memoirs, one of about 150 pages and the other of probably 50, are in the editor's hands awaiting their turn at the University Press. There naturally has not been time for the present summer's work to contribute anything.

No one would, of course, lay much store on this bulk method of estimating the value of the returns for the expenditure. The major part, though by no means all of what has been printed, is concerned with the description and record of organisms living in our area which before were almost wholly unknown. Some 518 kinds of organisms have been studied critically so far as the needs of identification and record are concerned. Of this number 106 have been treated by their authors as new to science, *i. e.*, have been described as new species. It is fair to assert, I believe, that as a result of these four years' work, some at least of the animal groups inhabiting our waters are better known to science than are the same groups of the Atlantic shores of the United States, where marine laboratories have existed and marine collecting has been practised for forty years at least.

It certainly would have been impossible to accomplish more than a small fraction of what has been done, but for the method that has prevailed and with the money to back it. Whether or not the knowledge gained is worth what it has cost I am willing to leave to the contributors of the funds and to the intelligent public.

Another aspect of the policy that I can not refrain from devoting a few sentences to is

that of the utilization of novitiate assistance. The employment of advanced university students to assist the full-fledged investigator in the prosecution of his own researches at a compensation sufficient to cover the student's expenses, is particularly satisfactory. It yields richly in two directions: it increases by as many fold as there are assistants, almost, the productive capacity of the professional, while at the same time it ought to be, and I believe is, a benefit to the students hardly to be secured in any other way. No help is so pleasant to give or so effectual, other things equal, as mutual help; and I know few relationships anywhere in labor that comes nearer realizing the ideal of reciprocal service than this one.

The proposed enlargement of the station's scope being of the future rather than of the past, can hardly claim a place in this report. I merely call attention of the members of the association to the fact that the purposes for which the organization was formed, as indicated in its articles of incorporation, anticipate this or any other expansions that the management may at any time deem wise to undertake.

NEWSPAPER SCIENCE

FINDS A LIZARD 314 FEET LONG.

Wyoming University Expedition Unearths the World's Biggest Fossil.

Baggs, Wyo., July 24.—The most important discovery ever made in the great fossil beds of Wyoming is the skeleton of an animal of the lizard type, just found, which shows a length of 314 feet.

It is by far the largest prehistoric animal yet discovered. The skeleton, which was found by an expedition from the Wyoming State University, is in a perfect state of preservation, every bone seeming to have been in place when petrification set in.

The skeleton is in the side of a hill of shale and has not been torn entirely from the stone in which it is imbedded, but the whole length can be seen.

One vertebra, which has been removed, weighed more than 1,000 pounds. The skeleton will be placed in the Wyoming State University, which has the greatest collection of fossils in the world.—New York *Sun*.

PLEASE NAME THIS FREAK.

Skeleton Resembling Both Horse and Snake Puzzles Naturalists.

Special to the New York Times.

Seneca Falls, N. Y., July 26.—A skeleton to which local naturalists are unable to attach a name was discovered to-night in an excavation here. The frame is five feet long from nose to tail, with two legs fifteen inches long. The head is identical with that of a horse, with deeply sunken eyesockets and massive jaws. On each side of the upper and lower jaws sharp tusks protrude, with a row of fine teeth between. The neck is short, and of graceful curve.

The spine is similar to a snake's, except that it is lined with thirteen ribs on each side and has a ten-inch tail joined directly on the spine. No socket for wings is apparent. The legs have a hip, knee, and ankle joint, and the extremely long toes are said to indicate web feet.

The ground where the object was found has never before been disturbed to the knowledge of local historians.—New York *Times*.

TOMATO ON A DAHLIA BUSH.

Owner Offers $25 for an Explanation of This Freak of Nature.

Special to The New York Times.

Atlantic City, N. J., Aug. 16.—William Wilson, a farmer of Pleasantville, has a freak product in a tomato growing on a dahlia bush. The tomato weighs about a pound, and is removed from the nearest tomato vine by at least 150 feet.

Wilson offers $25 to any one who can explain the freak of nature.—New York *Times*.

Dr. Hill is often called the "American Archimides," so profound is his knowledge of mathematical astronomy. His researches in connection with the lunar theory secured him some years ago the gold medal of the Royal