

or with specificities similar to that of pepsin are called "pepsinases." Similarly, enzymes which resemble papain in their activation and inhibition behavior are called "papainases."

In a recent review¹ it was urged that the designations for proteinases be as descriptive as possible of the *properties* of the enzymes. For instance, the terms "acidoproteinase," "neutroproteinase" and "basoproteinase" were suggested to indicate the pH region of optimum activity.

The proteinases of the higher plants appear to fall into two classes. One group includes such enzymes as papain, ficin and bromelain. These enzymes can be reversibly inactivated by mild oxidation and then reactivated by certain reducing agents. The name *anastrophic* (αναστροφή = reversal) is suggested for this group as being descriptive of this characteristic behavior. A second group is represented by solanain, hurain and arachain. Inasmuch as these enzymes are unaffected by either oxidizing or reducing agents, it is proposed that they be termed *stasidynic* proteinases (στασιμος = stationary, δυναμις = activity).

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SOVIET BIOLOGY

IN his recent report on Soviet Biology¹ Dr. Zhebrak assures us that "the careers of *many*² Soviet geneticists have not been adversely affected by the above-mentioned [Vavilov-Lysenko] controversy." If, as Zhebrak claims, Lysenko's "influence has been exerted in open debate between proponents of different scientific views and principles and not by political pressure" why should the career of any Soviet geneticist be so "adversely affected"? Of the three geneticists specifically mentioned in my original article Dr. Zhebrak accounts for only one. What has happened to Karpechenko, the geneticist who laid the foundation for work on allopolyploid hybrids which Zhebrak has developed so successfully? Where is Vavilov, one of Russia's greatest scientists and one of the world's greatest geneticists? Vavilov was elected president of the International Genetics Congress which met in Edinburgh in 1939, but Vavilov did not attend, and we have not heard from him since. We now have information from our National Academy of Sciences that Vavilov is dead. How did he die and why?

The American geneticists have long recognized the valuable work done in the Soviet Union and have

enjoyed the most cordial personal relationships in the past, but even before the war it was difficult to maintain personal contacts. No Soviet scientists attended the International Botanical Congress in Amsterdam in 1935 or the International Genetics Congress in Edinburgh in 1939. Perhaps lack of funds kept them at home, but China and India were represented. Isolationism in science, or in any other field, has no place in a modern world. We hope that we may soon resume communication and personal association with our Russian friends and colleagues.

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SCIENCE LEGISLATION

IN the November 30 issue of *SCIENCE* an article appeared on "Pending Legislation for Federal Aid to Science." It contains a letter to the President with 43 signatures of scientists and is followed by an endorsement of the principles embodied in the letter signed by R. Chambers and J. S. Nicholas on behalf of the executive committee of the Union of American Biological Societies and the American Biological Society.

Since this publication, attention has been called to an impression given by the letter to the President of an uncompromising attitude in regard to the administrative set-up that was recommended for the National Science Foundation. The letter specifically endorses the proposal of the Magnuson Bill, *viz.*, that the foundation be administered by a board of scientists appointed by the President. This form has the approval of a large number of scientists throughout the country and the consensus of opinion seems to be that, for fundamental scientific research, this is the best method of administration. The impression that the letter is uncompromising is unfortunate and should not be considered as such.

There are, at present, two proposals—one advocated by Senator Kilgore, the other by Senator Magnuson. The one differing from what has been presented above advocates a full-time administrator appointed by the President. Thus, we may consider two divergent viewpoints—one, a board appointing its own administrative officer, and the other, a director with an advisory board. If a mutually acceptable decision is not reached, the chances of a realization of a Federal Research Foundation are likely to be seriously jeopardized.

The present is the psychological time for securing a National Science Foundation. The telling experience of the war is fresh and has made the country very aware of science. Congress is reflecting this attitude in the consideration of various proposals for science legislation. The Bush Report, the President's message of September 6, and the four volumes of

¹ D. M. Greenberg and T. Winnick, *Ann. Rev. Biochem.*, 14: 31, 1945.

² A. R. Zhebrak, *SCIENCE*, 102: 357-358, October 5, 1945.

³ Italics mine.