of some such process. Though the literature has not been analyzed from this point of view, the burst of activity in physiological and psychobiological investigation coming in the past decade must in some degree reflect the stimulus afforded by the creation of laboratories for primate research by the foundations.

The break in the orderly march of these subjects

occasioned by the war and extending well into the post-war years, is cause for speculation on the course these graphs will take in the next five-year period.

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### SOCIETIES AND MEETINGS

#### THE TENNESSEE ACADEMY OF SCIENCE

THE forty-ninth meeting of the Tennessee Academy of Science was held in Nashville on November 28-29, at the George Peabody College for Teachers. President F. L. Wren presided. Friday and Saturday mornings were devoted to general sessions, with Friday afternoon reserved for sectional meetings. Fifty papers were presented.

The following chairmen presided at the section meetings on Friday afternoon: Botany: D. M. Brown, State Teachers College, Johnson City; Geology and Geography: R. A. Laurence (for B. C. Moneymaker), Tennessee Valley Authority, Chattanooga; Mathematics: W. L. Miser, Vanderbilt University, Nashville; Chemistry: L. J. Bircher, Vanderbilt University, Nashville.

The annual dinner was held on Friday night at the James Robertson Hotel. Vice-President D. M. Brown served as toastmaster. The address of Retiring President F. L. Wren was on the timely topic, "Our Public Trust," in which the speaker emphasized the new role and responsibility of science in the world of to-day. A beautifully colored motion picture, "The Sportsman's Dollar," was shown by the courtesy of the Educational Service of the State Department of Conservation.

At the meeting of the executive committee on Friday

#### SPECIAL ARTICLES A NEW PROTEASE FROM BROMELLA

## **PINGUIN L.1**

THE juice obtained from the fruit of the Bromelia pinguin L., commonly called "maya" in Puerto Rico, has a pleasantly acid taste, but produces a burning sensation when applied to the hand or lips, peeling the skin after a few hours.

Suspecting the presence of a proteolytic enzyme in this juice, it was tested by the milk-clotting method of Balls and Hoover,<sup>2</sup> as well as by the formol titration, using gelatin as a substrate. Similar tests were performed on heat-inactivated juice which served for

<sup>1</sup> Published with the approval of the director of the School of Tropical Medicine and of the director of the Agricultural Experiment Station of the University of Puerto Rico. A cooperative project.

and at the general business session on Saturday, the following business was transacted: (1) A committee appointed to proceed in the organization of a Junior Academy of Science. (2) A committee appointed to canvass the state to determine the number and type of science groups with the possibility of offering student membership in the academy at a reduced rate. (3) Jesse M. Shaver was elected representative of the academy on the Council of the American Association for the Advancement of Science. (4) Recommendations will be made to the incoming executive committee that in place of the regular spring meeting the academy convene with the newly organized Southern Association for the Advancement of Science.

New officers for 1941-42 were elected as follows: President: D. M. Brown, State Teachers College, Johnson City; Vice-President: C. S. Shoup, Vanderbilt University, Nashville; Secretary-Treasurer: Kendall E. Born, State Division of Geology, Nashville. Section Chairmen: Botany: Frances Ranney Bottom, George Peabody College for Teachers, Nashville; Geology and Geography: Robert A. Laurence, Tennessee Valley Authority, Jefferson City; Mathematics: J. A. Cooley, University of Tennessee, Knoxville; Chemistry: C. A. Buehler, University of Tennessee, Knoxville.

KENDALL E. BORN. Secretary-Treasurer

# control tests. The result of these trials is reported in

Table I, which shows the presence of a protease in the juice.

To obtain the crude enzyme, 100 cc of fresh maya juice were filtered with celite. To the filtered juice,

TABLE I

Juice	pH u	filk clotting F nits per cc of juice*	Formol titration. cc 0.01N NaOH per cc of juice	
Fresh	4.0	50	3.80	
Boiled	4.0	No clotting	1.10	

\* A milk-clotting unit is defined here as the amount of enzyme preparation required to clot 5 cc of standard milk solution from dried milk in one minute at 40° C.

2 A. K. Balls and S. R. Hoover, Jour. Biol. Chem., 121: 737, 1937.