chemicals on growth in protozoa at the agronomist, U. S. Military Government in Korea, vice-chairman. Branch societies, one each in Kyonggi Do and Kang Won Do provinces, were organized earlier and have been holding regular meetings.

The New York Academy of Medicine has recently organized a Section on Microbiology. The main objectives of this section will be the encouragement of the exchange of information among microbiologists and the promotion of ready contacts between clinical and laboratory investigators. The Fellowship of the section will be broad, including not only those who have a direct interest in microbiology, but also those who deal with microbiology in their primary functions as clinicians or scientists in other branches. The officers of the new section are: Gregory Shwartzman, Mount Sinai Hospital, chairman; Harry Most, New York University College of Medicine, secretary; and René J. Dubos, Rockefeller Institute for Medical Research, Frank L. Horsfall, Jr., Rockefeller Institute for Medical Research, Colin M. MacLeod, New York University College of Medicine, Ralph S. Muckenfuss, Research Laboratories, New York City Health Department, and John G. Kidd, Cornell Medical College, advisory committee.

Chicago Natural History Museum has acquired a large and important collection of plants from Ecuador, assembled and presented by M. Acosta Solis of that country. According to Julian A. Steyermark, assistant curator of the herbarium, this is the largest collection from Ecuador so far received by any institution. It is also one of the largest from a South American country to have reached the Museum.

Make Plans for—

Fifth International Pediatrics Congress, July 14–17, Waldorf-Astoria Hotel, New York City.

Symposium on Sound, July 21–22, University of Utah, Salt Lake City.

Conference on Algebra, July 25–28, University of Michigan, Ann Arbor.

American Association for the Advancement of Science, 114th Meeting, December 26–31, Chicago, Illinois.

COMMENTS *by Readers*

Perhaps no words are more often used incorrectly by systematists and their colleagues than *availability* and *validity*. The words are often erroneously used interchangeably and even with still a third meaning. Actually, three clear-cut concepts are involved: (1) simple proposals of names, whether in compliance with "legal" requirements or not; (2) "legally" acceptable proposals; and (3) "legally" acceptable proposals which can be recognized. An understanding of these concepts and the proper expression for each would greatly simplify and clarify nomenclatural discussions. The frequency with which they are inadequately distinguished has led to almost endless confusion.

For example, all of the following are occupied: *Scincus americanus* Petiver 1711, *Henicognathus annulata cyclura* Cope 1886, *Coluber novae Hispaniae* Gmelin 1788, *Bascanium semilineatum* Cope 1891, *Coluber arizonae* Boulenger 1894, and *Salvadora grahamiae* Baird and Girard 1853. All have been published in journals or books generally available to the public. Accordingly, *any name, once published, is occupied;* it may be available and/or valid or not.

However, *Scincus americanus* Petiver 1711, *Henicognathus annulata cyclura* Cope 1886, and *Coluber novae Hispaniae* Gmelin 1788 are not available (and therefore cannot be valid), since each violates at least one requirement of the International Rules of Zoological Nomenclature. The first name is pre-Linnaean (acceptable names must have been proposed after January 1, 1758); the second is a *nomen nudum* (no diagnosis or definition accompanied the name); and the third is not binomial (acceptable names must be proposed in a binomial system of nomenclature, although they may be trinomial). *Any name published in accordance with the International Rules of Zoological Nomenclature is both occupied and available,* whether valid or not.

Of the remaining names, only *Salvadora grahamiae* Baird and Girard 1853 is valid; it was properly proposed and is a synonym of no other name. *Bascanium semilineatum* Cope 1891 is a zoological synonym of *Masticophis bilineatus* Jan 1863, and *Coluber arizonae* Boulenger 1894 is a nomenclatural synonym of *Arizona elegans* Kennicott 1859. *Only an available name whose "title" to a species is clear* (*i.e.* which is neither a synonym nor a homonym of an earlier name) *can be valid.*

It is obvious that, at any one time, there can be only one valid name for a species, although there may be several available names and even more occupied names. Likewise, it is apparent that while all available names are occupied, not all occupied names are available. (HOBART M. SMITH, *Department of Zoology, University of Illinois, Urbana.*)

Recently, Traub and Slattery (*Plant Physiol.*, 1947, **22,** 77–87) observed that the invertase of bottom fermentation yeast differed markedly from that of top yeast in the effectiveness with which it hydrolyzed the levulins in the residue of the 89 per cent ethanol extract of guayule plants, *Parthenium argentatum* A. Gray. It is of interest to compare this observation on the hydrolysis of levulins with reports of earlier work with inulin in which it had been stated that enzymic hydrolysis of inulin [β-D-furanofructosidase activity] was an aspect of the invertase (sucrase or saccharase) of autolyzed yeast (Lindner. *Wschr. Braeu.*, 1900, **17,** 713–716, 762–765; Kuhn. In Hoppe-Seyler's *Z. physiol. Chem.*, 1923, **129,** 59–63; and especially Weidenhagen, as cited by Bamann and Myrbraeck in *Die Methoden der Fermentforschung*, 1940, p. 1900). Weidenhagen identified inulase as β-h-fructosidase, although he found that his preparation hydrolyzed sucrose 5,000 times as actively as it did inulin.

The data presented by Traub and Slattery show that under the experimental conditions top invertase hydrolyzed from 30 to 65 per cent more of the levulins present than were similarly hydrolyzed by bottom invertase. The ratio of the two kinds of activity in invertase preparations from top fermentation yeast differed from the analogous