cultivation make this method of obtaining proper food for Cladocera perhaps less useful in some cases than the one now to be described.

It seemed desirable to have a culture medium which could be readily obtained anywhere and at any season of the year. Such a medium has been obtained as follows: two pounds of fine garden soil are placed in a large battery jar (9 in. diameter); to this are added six ounces of finely divided fresh (8 to 15 days old) horse manure and the whole is covered with 10 quarts of strained pond water. Pond water is specified because Cladocera are extremely susceptible to the toxic effects of the salts of the heavy metals. Tap water should be used with caution until proved innocuous. The mixture is allowed to stand at 15° to 20° C. without disturbance for three days when it is strained through silk bolting-cloth. The proper straining is facilitated by carefully dipping out and straining most of the supernatant liquid and then agitating the remainder and with it rubbing a very small portion of the soil through the straining cloth. The solution is then ready for use, though in addition to being thoroughly stirred before being placed in the culture bottles it is usually diluted by adding pond water in the proportions of from 1 to 4 to 1 to 2, depending upon the degree of density in the appearance of the solution.

This culture medium has proved extremely useful to the writer and is now used exclusively for all his Cladocera cultures. No renewal of the solution in a culture bottle is ordinarily required during the life of an individual Cladoceran. Not every make-up of food proves equally satisfactory but persons unaccustomed to handling such culture water quickly learn the proper handling and dilution and very soon obtain excellent results. This soil-manure solution is equally practicable for rearing copepods and some, at least, of the rotifers.

Bacteria constitute the principal food element in this culture medium. While a certain amount of uniformity is attainable in such a culture medium, such mass cultures are quite variable and it is obvious that this can scarcely be considered a "standard" food. It is probable that the proper bacteria could be reared on agar plates, definite quantities introduced into the culture bottles at definite intervals and a really standard food thus obtained.

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THE NEBRASKA ACADEMY OF SCIENCE

The thirty-first meeting of the Nebraska Academy of Science, held in Bessey Hall, University of Nebraska, Lincoln, on April 1 and 2, was one of the most interesting in the history of the organization. The attendance was about one hundred, comprising many educational institutions of the state and one or two from adjoining states. The program was so full it was divided into three sections. A very pleasant feature was the annual dinner held in Ellen Smith Hall, followed by President Walker's address, and a general discussion of the needs and interests of the Academy. Dr. Walker made a number of recommendations and suggestions for the advancement of the organization, which has suffered in the past from a lack of the interest and enthusiasm which usually mark the annual meetings. The harvest time of the organization is between the annual meetings, if the officials are sufficiently active and progressive.

At the business session on Saturday morning a number of new members and the following officials for the coming year were selected: *President,* J. C. Jensen, Nebraska Wesleyan University; *Vice-president,* H. O. Sutton, Teachers' College, Kearney; *Secretary,* Rose Clark, Teachers' College, Peru; and *Treasurer,* P. K. Slaymaker, University of Nebraska. A number of amendments to the constitution were approved and the offer of Dr. Sheldon, of temporary headquarters for the academy with the Legislative Bureau, was accepted. University Place was chosen for the 1922 meeting.

W. F. Hoyt,
Secretary