

TABLE 1
REGISTERED ATTENDANCE AT WINTER MEETINGS, 1920-36,
EXPRESSED AS PERCENTAGE OF MEMBERSHIP

Section	Number of meetings	Percentage of membership attending meetings	
		American Association of Economic Entomologists	American Association for the Advancement of Science
Middle Atlantic . . .	6	22.7	25.4
New England	2	20.4	18.5
East North Central .	3	22.8	19.8
West North Central .	3	17.7	13.0
South Central	2	17.8	9.9
Canada	1	18.0	18.0

TABLE 2
AVERAGE ATTENDANCE AT ANNUAL MEETINGS IN VARIOUS
SECTIONS EXPRESSED AS PERCENTAGE OF AVERAGE
FOR MIDDLE ATLANTIC STATES. (CALCULATED
FROM TABLE ABOVE.)

Section	American Association of Economic Entomologists	American Association for the Advancement of Science
	Per cent.	Per cent.
Middle Atlantic	100.0	100.0
New England	89.9	72.8
East North Central . . .	100.4	78.0
West North Central . . .	78.0	51.2
South Central	78.4	39.0
Canada	79.3	70.9

Meeting places of the future will probably be selected on the basis of: (1) convenience of location; (2) facilities for large numbers of members; (3) rotation among important sections; and (4) cultural, scenic or general interest. The last two needs may be partly met by sectional or off-season meetings. Although there is a large membership on the Pacific Coast, it is worthy of note that a midwinter meeting has never been held there. It seems possible that, with present trends in automobile travel, winter meetings in the South might be well attended.

The facts studied show that, although entomological membership does not center very far west and south of association membership, a larger proportion of entomological society members than association members attend meetings in the western and southern sections.

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STUDIES IN THE POTASSIUM METABOLISM OF THE ANIMAL BODY BY MEANS OF ITS ARTIFICIAL RADIOACTIVE ISOTOPE

A STUDY of the metabolism of potassium is being conducted on the white rat with the aid of radio-potassium used as a "tracer." Some of the salient facts which have been observed are given below.

The absorption of potassium from the gastro-intestinal tract is very rapid when potassium chloride is

administered to a normal adult fasted rat, about 90 per cent. being absorbed within half an hour. Some of the absorbed potassium is very quickly rejected, mainly through the kidneys. The major portion is retained and taken up by the muscles and other soft tissues of the body. The radio-potassium incorporated into the tissues displaces a certain proportion of the potassium previously there, and appears subsequently to have the same fate as the ordinary potassium present in the body.

After the first few hours, the potassium retention per gram of fresh tissue—called the "specific affinity"—is about the same for such varied tissues as muscle, liver, kidney, stomach, small intestines and heart.

Another point of interest is that the liver takes up a greater fraction of the radio-potassium when it is administered orally than when it is injected intraperitoneally. This may be explained if the predominant path of potassium absorption is via the portal system.

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FOSSIL ALGAE FROM THE SALEM LIME- STONE OF INDIANA

SEVERAL years ago the writer briefly described and illustrated some peculiar "rod-and-bead" structures from the Salem limestone (Indiana building stone) of Indiana and suggested that they represented the castings of large worms.¹ This interpretation and one of the illustrations were included in "Invertebrate Paleontology," which appeared in the fall of 1935.² Since the Salem limestone has been used so widely for large state, federal and office buildings, extensive surfaces of the stone have been made available for examination; and it was hoped, therefore, that others who noted these peculiar structures, which show up clearly after the stone has weathered a few years, would scrutinize them carefully and test the validity of the suggested origin.

Late in 1935 Dr. Titus Ulke, of Washington, D. C., wrote to Dr. W. H. Twenhofel, calling attention to Fig. 43A in "Invertebrate Paleontology" and suggesting that the "rod-and-bead" markings were "... not worm castings and tracks, but *algae*, probably allied to ... " certain present-day lime-secreting forms.³ Several

¹ R. R. Shrock, *Proc. Ind. Acad. Sci.* for 1934, 44: 174-175, Figs. 1A-C, 1935.

² W. H. Twenhofel and R. R. Shrock, "Invertebrate Paleontology," McGraw-Hill Book Company, Inc., p. 137, Fig. 43A, 1935.

³ Letter to Dr. W. H. Twenhofel dated November 17, 1935.