

by more people than ever before in the history of eclipses. Since the discussion of shadow bands is a meteorological problem rather than an astronomical one, the Committee on Eclipses of the American Astronomical Society has requested the cooperation of the chief of the U. S. Weather Bureau. This has been readily granted, with the result that the shadow band observations are to be discussed by Dr. W. J. Humphreys, meteorological physicist of the U. S. Weather Bureau, who is also a member of the eclipse committee.

A request is hereby made that observations of shadow bands be sent to the Chief of the U. S. Weather Bureau, Washington, D. C.

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### THE SEGREGATION OF PHYSICAL GEOGRAPHY

WITHIN recent years there has been a tendency to segregate physical geography from the field of geography. There is voluminous literature available which emphasizes the position of physical geography as being geologic rather than geographic. In a few cases departments of earth sciences have reorganized since the wave of geographic interest with the result that physical geography is classified as a phase of geology.

Worthy reasons are undoubtedly responsible for these efforts and actions and it is not the intention of the writer to infer that they are not in part justifiable. The establishment of a department of geography separate from that of geology bears favorable comments, but the weaning of physical geography from geography, the mother of all sciences, is open to criticism.

The subject-matter of physical geography permits adaptation to both geography and geology. It may be referred to as a medium which merges into geography in one direction and into geology in the other direction. It is unquestionably the primary structure of the foundation of geography. Without its support geography is set adrift, which in many cases seems to be the state of affairs. The attempt to place greater emphasis on economics, history and political sciences as a substitute for physical geography has proven unsuccessful.

Every student of geography should be required to complete successfully either a separate course in physical geography or a fundamental course in geography in which emphasis is primarily placed on physical geography and climatology. These sciences serve with equal importance. If this statement is true,

and it is accepted that there is no objection to climatology as a course in geography, why should there be a tendency to set physical geography aside? If it is essential to consider the cause and effect of atmospheric changes, why is it not equally important to consider the cause and effect of the changes of the earth's surface? This same lack of continuity in geography courses appears in comparing physical geography and economic geography if the former is not considered a phase of geography.

There seems to be but one solution and that is not to segregate physical geography but to accept it as a distinct part of geography.

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### MICROSPORIDIA<sup>1</sup>

IN a biological and taxonomic study of Microsporidia,<sup>2</sup> I recently included three genera and a family which had previously been established by Léger and Hesse<sup>3</sup> and which have recently been found to be invalid by Dr. T. D. A. Cockerell, of the University of Colorado, who kindly called my attention to the matter.

In the present note, I propose, according to the Article 34 of the International Rules of Zoological Nomenclature, renaming these three genera and one family of the Microsporidia.

Genus *Coccospora* nom. nov. for *Cocconema* Léger et Hesse (1921 : 1419), not *Cocconema* Ehrenberg, 1829, in Polygastrica.

Genus *Spirospora* nom. nov. for *Spirospira* Léger et Hesse (1922 : 328), not *Spirospira* Meeks 1864, in Mollusca nor *Spirospira* Klebs 1892, in Protozoa, nor *Spirospira* Vuillemin 1905, in Protozoa.

Genus *Toxospira* nom. nov. for *Toxonema* Léger et Hesse (1922 : 328), not *Toxonema* Boehm 1895, in Mollusca.

The change in the generic name necessitates a similar modification in the family name as follows:

Family *Coccosporidae* nom. nov. for *Cocconemidae* Léger et Hesse (1922).

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<sup>1</sup> Contributions from the Zoological Laboratory of the University of Illinois, No. 255.

<sup>2</sup> Kudo, R., 1924, "A biologic and taxonomic study of the Microsporidia." Illinois Biological Monographs, Vol. IX, pp. 83-268.

<sup>3</sup> Léger, L. et E. Hesse, 1921, Microsporidies à spores sphériques. C. R. acad. sci., t. 173, pp. 1419-1421. 1922, Microsporidies bactériiformes et essai de systématique du groupe. *Ibid.*, t. 174, pp. 327-330.