

shortly afterwards, the birds showed infection of Manson's eye worms. Whole roaches were fed to non-infected birds with the results that within twenty to thirty minutes after the birds had eaten the roaches containing larvae, the parasites had reached the eyes of these birds.

The results obtained by Sanders in Florida confirm the work of J. W. Fielding as reported in *The Australian Journal of Experimental Biology and Medical Science* Vol. III (1926) that *Pycnoscelus* (*Leucophaea*) *surinamensis* is the intermediate host for Manson's eye worm of poultry. However, the work of Sanders in finding this intermediate host was done independent of Fielding's work.

The mature parasites are located in the tear sinus just beneath the third eyelid or nictitating membrane. In some cases, birds harbor only one or two parasites, while in a severe infection as many as fifty or more parasites may be present in the eyes. The mature parasite is 14-18 mm. in length and thread-like in diameter.

It is possible to infect many different kinds of wild birds by feeding them infected roaches.

A. L. SHEALY

AGRICULTURAL EXPERIMENT STATION,  
UNIVERSITY OF FLORIDA

#### RE NOMINA CONSERVANDA

EVEN after being so professorially lectured in *SCIENCE*<sup>1</sup> in an article which could more appropriately have appeared in the same medium as did the paper it attacks, the writer wishes to reply only to the extent of clearing up possible misapprehensions in the minds of readers.

By implication the writer is classed with those having the "mihi itch" in an objectionable form. He would state therefore that his object from his very first paper on entomological taxonomy has been to do essentially revisional work that would have a maximum of teaching value to younger entomologists and be a real aid to identification of species in the hands of more advanced students. To date he has been sole or joint author of fifty-two articles dealing with the classification of insects and thirty-nine of these are revisional in scope or at least include keys. The piling up of mere descriptions of new species has never been his object; but on the contrary is an activity he heartily condemns. At the same time he believes that personal interest in achievement is no more lacking in taxonomic work than in other fields of human endeavor, and that this is only as it should be, altruistic platitudes to the contrary notwithstanding.

<sup>1</sup> Bradley, J. Chester, 66, 100-103, July 29, 1927.

Professor Bradley insists on the separability of taxonomy and nomenclature, but passes over the writer's suggestion that a code of vernacular or other names could be used by general biologists that would have no necessary connection with technical taxonomy.

Bradley's reference to general zoologists, morphologists, etc., riding rough shod over taxonomists is certainly well put, for just that is what has been attempted in the making of nomina conservanda. Taxonomists deal constantly with morphology and use morphological terms almost as much as the morphologists themselves, yet they have not attempted to dictate standardization of anatomical terms, new ones of which are constantly being introduced. Taxonomic nomenclature is no more the language of science than is anatomic nomenclature and is no more subject to dictatorial rule.

Bradley ends on a note of not becoming a slave to rules, which he may be sure finds an echo in the breasts of men so individual and independent as taxonomists usually are. They desire to be the slaves neither of rules nor of rulers (*i.e.*, of Committees and Congresses).

W. L. McATEE

#### EARTHWORMS AND SPECTRAL COLORS

THE article by W. R. Walton on "Earthworms and Light" in *SCIENCE* for August 5, 1927, recalled to me some research I did in this line some years ago but did not publish.

For the experiment I used a box about two and a half feet long, two feet wide and eighteen inches high. This I thoroughly blackened inside. For light I used gas with a mantel and a reflector. The light was passed through a carbon-di-sulphide prism. The light fell on a white paper in the bottom of the box. Into this array of spectral colors I dropped angleworms. As they moved to get away from the light they always went out the red end. They would pull back from the blue as if it hurt them and turn toward the red. This reaction occurred with every worm except one. This worm lay full length in the green and stayed there. I was not able to repeat this last reaction.

G. H. BRETNALL

BAKER UNIVERSITY

#### SCIENTIFIC APPARATUS AND LABORATORY METHODS

##### A SIMPLE AUTOMATIC DEHYDRATING APPARATUS FOR MANY SMALL OBJECTS

THE accompanying figure represents a very satisfactory apparatus for changing fluids on many small objects. It grew out of the need for saving time in handling ovaries of mice. It is essentially a glass