

(0.003 per cent.)," *i. e.*, of magnesium sulphate (anhydrous, 0.00147 per cent.).

4. It is a well-known fact that many compounds that act poisonously at a certain concentration can act in very high dilution as stimulants of growth.

Miss Burlingham said nothing to the contrary. She found nothing in opposition to it. There is nothing in her abstract to warrant the inference that she was not aware of this "well-known fact."

5. It is erroneous to attribute this stimulating action to any nutritive quality of the poison.

Miss Burlingham did not "attribute this stimulating action to any nutritive quality of the poison." She said her results "show conclusively that magnesium sulphate in proper dilution is *beneficial* to the growth of seedlings." She did not offer any explanation of her preliminary results, merely stated them.

It is ridiculous for Professor Loew to assume that Miss Burlingham exhibited prejudice in her abstract, for neither she nor I had any preconceived notions to establish, nor any theories to maintain. Her conclusions were drawn impartially from her results.

Professor Loew concluded his letter with the following unbiased allusion:

6. The unprejudiced reader who desires some information as to the nutritive rôle of magnesium salts in plants and to the conditions under which this function can be performed, is kindly requested to consult Bulletin No. 45 of the Bureau of Plant Industry, "The Physiological Rôle of Mineral Nutrients in Plants," Washington, 1903.

I cheerfully commend "Bulletin No. 45," of which Professor Loew is the author, to the attention of any one wishing "information as to the nutritive rôle of magnesium salts in plants and to the conditions under which this function can be performed." The said bulletin is the most valuable single contribution to our knowledge of the questions discussed in it, and reflects brightly the flood of light that Professor Loew has thrown upon the subject since he undertook its investigation. Nevertheless the "unprejudiced reader" of it will certainly conclude, after studying "Bulletin No. 45," that there is probably very much

more for all of us, including Professor Loew, to learn about the "nutritive rôle of magnesium salts in plants" and "on the conditions under which this function can be performed." The "unprejudiced reader" will also surely welcome such earnest attempts as Miss Burlingham's to extend our information on details of the subject.

Miss Burlingham's preliminary paper appeared in the July number of the Journal of the American Chemical Society. It gives the data upon which were based the remarks in her abstract that Professor Loew has misinterpreted for the "unprejudiced reader." It makes further comment here unnecessary.

WILLIAM J. GIES

NEW YORK BOTANICAL GARDEN

A NOTE ON CERTAIN WIDELY DISTRIBUTED LEAFHOPPERS (HEMIPTERA)

CERTAIN leafhoppers have more or less recently become notorious for the damage they occasion to various cereals, such as sugar-cane and sorghum. *Perkinsiella saccharicida* (Kirkaldy) has done much damage in Hawaii, having been introduced from Queensland, where, however, it is not native. It is to be found wherever sugar-cane is grown in Australia and Hawaii, and I have recently received it from Java. *Peregrinus maidis* (Ashmead) was described from maize in Florida and is now widely distributed over the southern United States; it has an even wider range now than *Perkinsiella saccharicida*, for it is all through eastern Australia, Hawaii, Viti and, I think, Java, while Mr. Distant has recently redescribed it as *Pundaluoya simplicia* from Ceylon.

G. W. KIRKALDY

SPECIAL ARTICLES

COLOR INHERITANCE AND SEX INHERITANCE IN CERTAIN APHIDS

THE color changes that occur in the sexual generation of certain aphids, and the correlation of a definite color with each sex, have suggested that these insects may furnish favorable material for testing the possibility