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The Earliest Known Epiphytotic of Rust in Iowa (Abstract)

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tests indicate that the method may be useful for germinating the pollen of many species, providing an easily performed, stimulating experiment for elementary students.

BOTANY DEPARTMENT,
IOWA STATE COLLEGE,
AMES, IOWA.

THE USE OF TETRACHLORETHANE IN THE ERADICATION OF THE EUROPEAN BINDWEED (ABSTRACT)

A. L. BAKKE

Tetrachlorethane, made by the addition of chlorine to acetylene, has proved to be effective in killing the European bindweed. By making holes 18 inches deep and having the holes 18 inches apart and placing two ounces of tetrachlorethane in each hole, a complete eradication of the European bindweed may be made with one application.

BOTANY DEPARTMENT,
IOWA STATE COLLEGE,
AMES, IOWA.

THE EARLIEST KNOWN EPIPHYTOTIC OF RUST IN IOWA (ABSTRACT)

MARIE A. CORKLE AND I. E. MELHUS

A rust epiphytotic in 1858 apparently has been overlooked in the study of disease prevalence in Iowa. Early Iowa agricultural records and newspapers contain numerous reports of the calamitous wheat and oat failures caused by rust in 1858; yet this rust year has not been reported in any scientific publication from Iowa. Wheat yielded an average of 4.2 bushels per acre, oats 5.4 bushels, while the yields for 1855 were 14.09 and 32.09 bushels per acre, respectively. County agricultural societies reported either total wheat crop failures or very poor yields, with the exception of Van Buren and Woodbury Counties, which reported "medium" and "fair" yields, respectively. In general, oats were reported as a total failure or seriously injured. Throughout the state grain fields were left uncut, not being worth the expense of harvesting. Losses were attributed to rust and wet

weather conditions, with occasional mention of blight and scab. Weather records show that rainfall was excessive during May, June and July, thus providing a favorable environment for the development of a rust epiphytotic.

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NOTES ON IOWA PLANTS (ABSTRACT)

GEO. J. GOODMAN

Four species of flowering plants are reported as new to the state and notes are made on three other species.

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AMES, IOWA.

THE GENUS *LYSIMACHIA* IN IOWA (ABSTRACT)

GEO. J. GOODMAN AND P. J. LEYENDECKER

A taxonomic treatment, in which the genus *Steironema*, consisting of three species in Iowa, is united with the genus *Lysimachia* in accordance with the opinion of recent students of these members of the primrose family. Of the total of six species, three require changing of the specific epithet.

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A SECOND SUPPLEMENT TO THE CATALOGUE OF
PLANTS IN THE IOWA STATE COLLEGE HERBARIUM
(ABSTRACT)

ADA HAYDEN

Incident to the year's collection of Iowa plants, about 15 additional species and varieties may be added to the first supplement issued in January, 1940.

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IOWA STATE COLLEGE,
AMES, IOWA.