

Proceedings of the Iowa Academy of Science

Volume 40 | Annual Issue

Article 20

1933

Additions to the Flora of Linn County

E. J. Petry

Copyright © Copyright 1933 by the Iowa Academy of Science, Inc.
Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Petry, E. J. (1933) "Additions to the Flora of Linn County," *Proceedings of the Iowa Academy of Science*, 40(1), 79-79.
Available at: <https://scholarworks.uni.edu/pias/vol40/iss1/20>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

THE DEVELOPMENT OF NEW LATERAL ROOTS IN
RELATION TO THE CROWN BUDS IN
MELILOTUS ALBA

J. N. MARTIN

In transplanting the biennial sweet clovers from the field to the greenhouse during the dormant period it was observed that the removal of the crown buds interfered with the development of new secondary roots. In the absence of the crown buds fewer new secondary roots were formed and those formed were especially characterized by the absence of branching. The same results were obtained when light was excluded from the crown buds. This fact indicates a relationship between the formation of new secondary roots and the chlorophyll activity in the crown buds. By grafting crown buds on decrowned roots which were no longer capable of developing new secondary roots the ability to develop secondary roots was restored, provided the tissues of the root and crown bud united. Otherwise the grafted crown buds developed without imparting to the root the ability to form secondary roots. When the crown buds were removed or light excluded there was much less transformation of the reserve starch in the root.

DEPARTMENT OF BOTANY,
IOWA STATE COLLEGE,
AMES, IOWA.

ADDITIONS TO THE FLORA OF LINN COUNTY

E. J. PETRY

A list of unreported species for Linn County, Iowa, together with remarks upon emendations.

OBSERVATIONS ON THE STAINING OF
BACTERIAL FLAGELLA

E. J. PETRY

Influence of the pH of the medium, on the staining of flagella, as shown by several of the more highly recommended methods.