

Proceedings of the Iowa Academy of Science

Volume 45 | Annual Issue

Article 18

1938

Forest and Soil Studies in Southern Iowa

J. A. Larson

Iowa State College

Richard J. Dillworth

Iowa State College

Copyright © Copyright 1938 by the Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Larson, J. A. and Dillworth, Richard J. (1938) "Forest and Soil Studies in Southern Iowa," *Proceedings of the Iowa Academy of Science*: Vol. 45: No. 1, Article 18.

Available at: <https://scholarworks.uni.edu/pias/vol45/iss1/18>

This Research is brought to you for free and open access by 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.

bodies, apart from nucleus, chondriosomes and centrosomal mechanism.

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

SOIL MOISTURE RELATIONSHIP OF THE EUROPEAN BINDWEED (*CONVOLVULUS ARVENSIS* L.)

A. L. BAKKE

The European bindweed (*Convolvulus arvensis* L.) has an extensive root system. A large number of feeding roots are located in the upper two feet but the main tap root often extends to a depth of twenty feet. Soil samples taken at one and two foot depths in 1933, 1934 and 1935, at Hawarden, Iowa, from corn ground, heavily infested with bindweed, and free from bindweed, showed very little difference in soil moisture content. As the soil moisture content was often below the wilting coefficient, it was found that the bindweed developed readily while the corn grew very little. European bindweed is able to complete successfully with corn because of its deeply penetrating root system.

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

FOREST AND SOIL STUDIES IN SOUTHERN IOWA

J. A. LARSON AND RICHARD J. DILLWORTH

This paper deals with the present forest lands in southern Iowa counties, giving their relations to topography, soils and settlement; setting forth their local distribution, variations and condition; the depletion due to intensive culling and grazing and the responses of the trees in form and growth to slope, aspect and soil characters. Laboratory analyses have been made of different soil types which support the native trees and efforts will be made to correlate soil depth and quality with form and rate of growth of the trees. The report includes data on age classes and stand densities in that region.

FORESTRY DEPARTMENT,
IOWA STATE COLLEGE,
AMES, IOWA.