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Forest and Soil Studies in Southern Iowa

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bodies, apart from nucleus, chondriosomes and centrosomal mechanism.

DEPARTMENT OF BOTANY,
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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.

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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.

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