

SOIL AND ATMOSPHERIC SCIENCES

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ABSTRACTS

Growth Results of Black Walnut (*Juglans nigra*) Seedlings on Soil Types of East-Central and Southeastern Indiana. DONALD R. HENDRICKS, Hayes Regional Arboretum, Richmond, Indiana 47374.—From 1967-1969, black walnut (*Juglans nigra*) seedlings of six different seed sources were planted on twelve different soil types of east-central and south-eastern Indiana for determining the best soil type and seed source needed to grow black walnut trees for veneer. Measurements of height and diameter were kept for a five year period and computerized to test for differences in growth.

Analyzing Indiana's Soil Associations for Future Land Uses. HARRY GALLOWAY, JOSEPH YAHNER, DONALD FRANZMEIER and G. SRINIVASAN, Agronomy Department, Purdue University, West Lafayette, Indiana 47907.—Ninety-two county general soil maps show 108 Indiana soil associations each on a characteristic landscape and named for the 2 to 4 principal soil series included. Legends describe their relief, drainage and parent materials. Such maps have been widely used to demonstrate occurrence of main soil areas and have proven very valuable for comprehensive planning of many sorts. They are destined to play an important role in agricultural and community development decision making.

Soils comprising each association were recently estimated and a number of interpretations were made for the use and management potential of each. Data are printed on the backs of revised county general soil maps.

Interpretive analyses made by counties show 21 features of interest for each association including crop production potentials, productivity indices and comparative drainage and erosiveness; also, response to irrigation, organic content of surface soils and land uses in 1960. Associations are rated for adaptability to use of home spetic systems.

County maps are available singly on request or can be purchased in book form through Cooperative Extension Service, Purdue University.