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Nutritional Physiology of Certain Dioecious Plants

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results confirm the report of Allison and Hoover of an accessory factor for Rhizobium.

Asparagin, aspartic acid and related compounds were not able to replace the growth factor, but acted as very readily available sources of nitrogen. The organisms were able to attack the amino group of asparagin with greater ease than the amid group. The two carboxyl groups increased the availability of the amino group and also promoted the growth of the organisms.

DEPARTMENT OF SOILS,
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SELF-PARASITISM IN *ACHLYA RACEMOSA* HILDB.

MYRLE M. BURK

In cultures of *Achlya racemosa* Hildb. oospores in the oogonium were completely absorbed by hyphae arising from antheridia or from the wall dividing the oogonium and stipe.

WATERLOO, IOWA.

DEPOSIT OF SILICA IN *ACER SACCHARINUM* L.

MYRLE M. BURK

Report of a small quartz pebble found imbedded in the wood of *Acer saccharinum* L.

WATERLOO, IOWA.

NUTRITIONAL PHYSIOLOGY OF CERTAIN DIOECIOUS PLANTS

W. F. LOEHWING AND L. C. BAUGUESS

Further study has been made of the metabolic expression of sex in shoots of typical dioecious hemp plants. Results obtained show significant differences in metabolism of corresponding shoot regions of the two sexes before as well as after the development of sexual dimorphism.

DEPARTMENT OF BOTANY,
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