

1934

The Foliar Embryos of *Tolmiea Menziesii*

John A. Yarbrough
State University of Iowa

Copyright ©1934 Iowa Academy of Science, Inc.

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

Recommended Citation

Yarbrough, John A, (1934) "The Foliar Embryos of *Tolmiea Menziesii*," *Proceedings of the Iowa Academy of Science*, 41(1), 111-111.

Available at: <https://scholarworks.uni.edu/pias/vol41/iss1/19>

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.

SHORTENING THE REST PERIOD OF THE TUBERS
OF THE JERUSALEM ARTICHOKE, *HELIANTHUS*
TUBEROSUS L.

E. S. HABER

Experiments are reported in which the rest period of dormant tubers of the Jerusalem artichoke was shortened by storage at temperatures near or slightly below freezing. The length of the rest period or dormant stage was directly dependent on storage temperature; the lower the temperature down to slightly below freezing, the shorter the rest period.

Ethylene chlorohydrin and thiourea were effective in breaking the dormant period. Sodium thiocyanate was not as effective as ethylene chlorohydrin and thiourea and sodium nitrate was not effective at all.

Tubers harvested on Sept. 27 germinated as promptly, although considerably less mature than tubers harvested Nov. 1.

Ethylene chlorohydrin and thiourea treatments applied to tubers no longer dormant delayed germination.

Thiourea caused multiple sprouting, which was more pronounced when tubers were treated after dormancy had been broken.

Tubers held for three or more months at temperatures near the freezing point exhibited a tendency to produce more than one sprout per seed piece.

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

THE FOLIAR EMBRYOS OF *TOLMIEA MENZIESII*

JOHN A. YARBROUGH

A careful study has been made of the developmental history of the leaf borne shoot and roots of *Tolmiea Menziesii*. Comparisons of these formations with similar ones appearing on leaves of *Bryophyllum calycinum* are considered.

DEPARTMENT OF BOTANY,
STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.