THE NUTRITION OF THE POTATO PLANT WITH
SPECIAL REFERENCE TO WATER CULTURES.1

W. Newton.2

The technical difficulties of controlling the moisture supply in
sand or soil cultures are fully appreciated by plant physiologists.
Owing to the differences in the transpiration rate of individual
cultures, it is difficult to maintain a constant moisture supply. In
addition, the usual procedure of maintaining the cultures at a con-
stant weight by the addition of water involves a large amount of
labor and is subject to criticism in that corrections cannot be accu-
rately applied for the differences in the weights of individual plants
which are constantly changing. Furthermore, the supply of water
in sand or soil cultures is relatively small, consequently the distri-
bution of the added water in relation to the root's absorbing sur-

1 Contribution from the Department of Agronomy, University of California,
Berkeley, Calif. Received for publication, July 1, 1923.

2 Graduate student.