1-1956

EC178 Revised 1956 Shall We Grow Hubam Sweetclover

D. L. Gross

J. D. Furrer

Follow this and additional works at: http://digitalcommons.unl.edu/extensionhist

http://digitalcommons.unl.edu/extensionhist/2140

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
shall we grow
HUBAM
sweetclover

university of nebraska - lincoln

cooperating
w. v. lambert, director
Shall We Grow Hubam Sweetclover?

D. L. Gross, Extension Agronomist, Retired and J. D. Furrer, Ass't. Extension Agronomist

There have been many inquiries relative to the merits of annual sweetclover (Hubam) as compared to the common biennial sweetclover. These inquiries have come chiefly from farmers in irrigated sections who are growing beets and early potatoes. These crops require early spring plowing, seed bed preparation, and planting if the best yields are to be obtained.

Biennial sweetclover is used to best advantage when it is plowed in the spring of the second year after it has made about 6 inches of growth; however, plowing at this time does not always fit well into the farm operations. Plowing biennial sweetclover earlier often results in poor kills. Thus, it may act as a weed in the beet or potato crop which follows, interfering with seed bed preparation, planting, thinning, cultivation, irrigation, and harvesting. Biennial sweetclover land plowed at the end of its second-year's growth provides an ideal soil condition for growing beets and potatoes. However, farmers do not wish this clover to make its full second-year growth since it does not add a great amount of additional nitrogen, and the returns from sweetclover pasture, silage, or seed are commonly less than from a crop of potatoes, beets, or corn. It is for this reason that annual sweetclover is considered. The annual type produces seed and dies four to five months from planting, leaving no heavy roots or tops to interfere with tillage operations. The question arises as to whether or not the annual sweetclover will add enough nitrogen to the soil to maintain satisfactory yields of the following crops.
Studies have shown that a vigorous growth of Hubam, plowed under when in full growth and before seed is set, will add about one half as much available nitrogen to the soil as the first-year growth of the biennial. If the Hubam tops are removed by grazing or otherwise, or if a seed crop is harvested, the amount of nitrogen added to the soil by the Hubam may be less than one tenth as much as would be added by the first-year growth of the biennial. Nearly all of the nitrogen in the annual is in the tops.

The amount of nitrogen added to the soil by sweetclover, whether annual or biennial, is in proportion to the size and density of the growth. Under very good growing conditions, biennial sweetclover may add as much as 150 to 175 pounds of nitrogen per acre in its first-year growth. A 15-ton crop of sugar beets will remove about 135 pounds of nitrogen from the soil. Calculations, therefore, indicate that even a heavy growth of Hubam will add sufficient nitrogen for only about 8 to 9 tons of beets. If profitable yields are to be obtained and soil nitrogen maintained, it will be necessary to supplement the nitrogen added by the Hubam with nitrogen from other sources such as barnyard manure and commercial fertilizers.

It must be kept in mind that where the Hubam does not make a heavy growth, the nitrogen added to the soil is correspondingly reduced. It is well to consider, also, whether or not the occupancy of high producing land by Hubam alone or Hubam and a nurse crop for an entire season is justified, considering other sources of nitrogen.