PRELIMINARY INFORMATION ON SWEET LUPINES IN THE UNITED STATES

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FOR the past 200 years or more lupines have been used in central European countries. In the United States their use is of recent date. Experimental plantings in this country through many years failed to prove adaptation to any region until plantings made in 1930 at the Florida Agricultural Experiment Station at Gainesville indicated their possible value for the lower South. Plantings in subsequent years at the experiment stations at Gainesville and Quincy, Fla., further verified this conclusion, and commercial plantings followed with seed production in 1944 reaching over 7 million pounds.

The commercial acreage of lupines has been made up entirely of a high alkaloid strain of the so-called blue lupine, Lupinus angustifolius L. This is used as a winter cover crop for soil improvement and for the production of seed for further plantings. The success in growing the high alkaloid variety suggested the possibility of using seed of a nonalkaloid or sweet variety as feed for livestock, since a good seed crop in late spring when concentrate feeds are scarce would fit well into any scheme of livestock production.

SOURCE OF MATERIAL

Varieties with little or no alkaloid had been reported from Russia and Germany so an attempt was made to obtain seed from these countries. No seed was obtained from Russia, but a number of samples of blue, L. angustifolius L., yellow, L. luteus L., and white, L. albus L., lupine were received from the Kaiser Wilhelm Institute of Germany. These, however, all proved to be strains with high alkaloid. From the experiment station at Lansberg, in south Germany, one packet of the white lupine was received that proved to have little or no alkaloid. Seed of the three common European species previously mentioned also were obtained from a number of other sources. These varied in alkaloid, with some containing very little of this principal. The lots of seed that were found to contain the least alkaloid were planted at Gainesville, Fla., and Baton Rouge, La., in 1938. These were grown and further selected in succeeding years after testing each individual plant for alkaloid. By this procedure there have been obtained strains of blue and yellow lupine that are practically free of alkaloid and that have made sufficiently good growth to suggest their use as regular crops.

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