A SURVEY OF LEGUME PRODUCTION AND PERSISTENCE 
IN THE UNITED STATES 

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SUMMARY 

In 1988, 26 forage specialists from 20 states representing different regions in the USA were surveyed. For their areas, 43% of the respondents indicated that legumes were extensively grown in pastures and 57% said that legumes were not extensively grown. Over the next 5 to 10 yrs, 68% of the respondents expect legume use to increase, 32% expect use to remain the same, and none expect a decline in legume use. Problems identified with legumes were (i) lack of persistence, especially for red clover (Trifolium pratense L.) and white clover (T. repens L.), (ii) difficulty in successful establishment especially with birdsfoot trefoil (Lotus corniculatus L.) and strawberry clover (T. fragiferum L.), (iii) lack of competitiveness with grasses, (iv) stand losses from heaving, (v) inadequate heat, cold and/or drought tolerance, (vi) lack of adequate disease, insect and nematode resistance, (vii) poor tolerance to soils with low pH and high aluminum content, (viii) allelopathic effects of some grasses on legume establishment and growth, (ix) not able to withstand continuous grazing, (x) low percentages of hard seed, and (xi) low N₂ fixation. Availability of more persistent legumes would benefit grassland agriculture in the USA. 

INTRODUCTION 

In 1985, Knight published a review on the distribution and use of forage legumes in the USA. Also, a comprehensive review by Burns (1985) about legume-based forage systems in the southern USA appeared in the same publication. These reviews are recommended for those not acquainted with forage-legume production and use in the USA. 

This review is compiled from the results of a survey that I conducted in 1988 of forage specialists in different regions and within regions in the USA. Comments of the participants serve as examples of concerns that scientists have about problems associated with legume production and persistence in their areas. This survey will identify problems of forage legumes that should be addressed in workshops and in research.