

Value of Mesquite Leaves as Forage

Cited in:

J Sci Food Agric 44, 111-117, 1988

Value of Mesquite Leaves as Forage

Cameron K Lyon, Michael R Gumbmann and Robert Becker

Western Regional Research Center, ARS, USDA, Albany, CA 94710, USA

(Received 5 May 1987; accepted 17 November 1987)

Abstract

The nutritive value of six species or cultivars of mesquite (*Prosopis*) was investigated: viz *P alba*, *P articulata*, *P chilensis*, *P nigra*, *P velutina* and cv 'Ruby'. Chemical analyses indicated that all of these are suitable sources of forage. However, *in vitro* digestibilities are negatively correlated with the content of phenolic compounds. Species with high concentrations of phenolics (*P alba* and *P chilensis*) are significantly less digestible than other species with lower phenolic content. Toxicity of the phenolic components of *P chilensis* leaves was observed in feeding studies with weanling mice.

Key words: *Prosopis*, mesquite, forage, *P alba*, *P articulata*, *P chilensis*, *P nigra*, *P velutina*, digestibilities, phenolics, mice, leaves, toxicity, composition.

Reference

Gupta M C, Gandhi B M, Tandon B N 1974 An unconventional legume-*Prosopis cineraria*. Amer J Clin Nutr 27 1035-1036.