Nutritive composition of green and ripe pods of honey mesquite (Prosopis glandulosa, Fabaceae)

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Nutritive composition of green and ripe pods of honey mesquite (Prosopis glandulosa, Fabaceae)

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Abstract:

Pods from Prosopis glandulosa (honey mesquite) were harvested at seven different growth stages. Protein content (N × 6.25) of the whole pod decreased with maturation with small differences occurring after stage 3. Seed contained about 82% of the total pod protein. Carbohydrate accumulated primarily in the pericarp, and ripe pods (stage 7) contained about 80% total carbohydrate. Fat content of the pod increased slightly with maturation while total ash and fiber (ADF) decreased. Small differences existed between stages 4 and 7 in the essential amino acid pattern of whole pods. The total sulfur-containing amino-acids were the most limiting in both growth stages; the pericarp protein had a relatively better amino-acid pattern than did the seed protein. Both green and ripe honey mesquite pods provide similar amounts of micro- and macro-minerals.

Reference:

Letter: An unconventional legume--Prosopis cineraria Gupta M.C., Gandhi B. M. and Tandon B.N. American Journal of Clinical Nutrition 27(10):1035-6, 1974

Value of Mesquite leaves and forage

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Value of Mesquite leaves and forage

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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.

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