

Comments on: The integration of fodder shrubs and cactus... by A. Nefzaoui

**From Claudio A. Flores Valdez <caflores@taurus1.chapingo.mx>
Comments on the efficiency of water use of *Opuntia* compared to alfalfa**

*Apart from the well-known use of *Opuntia* as a drought feed, is it a major fodder all year round in your area? If not, what are the constraints impeding this happening considering its very efficient use of water compared to other traditional fodders?*

Some reports from South Africa on the productivity of *Opuntia* versus alfalfa are:

1. De Kock, G.C. 1965. El mejoramiento de nopales sin espinas (*Opuntia* sp), como forraje resistente a la seca. Anales 9no. Congreso Internacional de Pasturas. Sao Paulo, Brasil. 2:1459.

He found that *Opuntia* produced more TDN than alfalfa per unit of water provided.

2. Havard-Duclos, B. 1969. Las plantaciones forrajeras tropicales. Ed. Blume. Barcelona, España. 380 p.

He reports that with 3,000 cubic meters of irrigated water, given twice during the dry season, he can irrigate 1.17 ha of alfalfa or 17.55 ha of a combination of *Opuntia*-*Atriplex* (irrigation by rows), and the nutrients yields per ha are similar. Thus, this combination produces 15 times more nutrients than alfalfa with the same amount of water.

3. Monjauze, A. y Le Houeou, A.N. 1965. The role of *Opuntia* in the agricultural economy of North-Africa. Bull. Ecole Sup. Agric. Tunis. Nos. 8-9:85-164.

They consider the irrigation of *Opuntia* as an interesting possibility, since it produces seven times more energy than alfalfa per unit of water.

Opuntia is used as forage in the north of Mexico, where there are dairies producing all year round with *Opuntia* based-diets.

There is also beef production on rangelands where the amount of *Opuntia* used depends on the drought conditions. During the last drought, there were ranches where *Opuntia* was used for 30 months, by burning the thorns directly on the plant in the field.

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