

Importance of Cacti (*Opuntia* sp) and Its Role in Dryland Management

Chapter

18

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ABSTRACT

Introduction of drought tolerant plant species and adoption of soil and water conservation are regarded as component of management strategy for arid lands. Cacti and platyopuntias are CAM plants with ability to withstand long periods of droughts and able to produce large quantities of fodder during periods of favourable rainfall. Nutritionally cactus is low in crude protein, fibre phosphorus and sodium. Opuntias are high in moisture (85-90%), soluble carbohydrates, vitamin A (29 µg/100 g carotenoids), Ca (1.4%) and ash (20%). By appropriate supplementation and feed combination, the protein deficiency can be overcome. The studies indicate that Opuntias can be successfully integrated in rangelands. With high water and rainfall use efficiency cactus form a good component in the arid ecosystem. Once established, the cactus can either be subjected to controlled grazing or stall feeding. The adaptability studies conducted show that the crop can very well come up in the arid regions of India.

1 INTRODUCTION

Rangelands are land areas on which the indigenous vegetation (climax or natural potential) consist predominantly of grasses, grass-like plants, trees and shrubs and are generally characterized by low and/or erratic precipitation, poor drainage, rough topography, and often low soil fertility (Society for Range Management, 2001). Fire, rainfall, soil type and grazing

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