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Short Communication

Nutritional Important for Livestock Growth in Wetland Halophytes: A Review

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Halophytes are highest salt tolerant conditional flora (>200mM) in estuarial wetland and marine ecosystem [1]. It is well known that mangrove wetlands play an important role in supplementing the nutritions mainly of livestock growth and milk productions [2,3]. Review of the optimal nutrients composition and bioactive components of mangrove flora and their associates were documented in terms of proteins, lipids, carbohydrates, chlorophylls, drugs and other components [3-5]. Previous studies on mangrove flora in Gujarat, Ahmedabad, Kutch, Bharuch, Maharashtra, Goa, Tamil Nadu and Ponducherry have been reported that the occurrence of fodder-nutrients are an effective in India and beneficial to livestock [6-11]. Similar studies have been reported in worldwide, especially in Africa, New Zealand, Red Sea, Oman, Gulf of Aden, China, Iran, Vietnam, Egypt, Qatar, Arabia and Pakistan [12-20]. *Avicennia* species is one among over-dominance found in wetland marsh ecosystems (southern India). According to Kafaji., *et al*. [21], leaves of the *A. marina* have been reported to be higher in protein content that it has compared to the stem and root. In addition, the source of the leaves cited as an important minerals such as selenium, manganese, copper and zinc that provide highest level of milk productions in livestock [7,22,23]. Lipids and carbohydrates levels were also recorded as the higher percent in the leaf area of *Avicenna* species than in stems and roots, reported by Khafaji., *et al*. [21]. The diet of the *A. marina* was very beneficial to the camel and its efficient alternative fodder mainly to the cattle (Sathe., *et al*. 2016). *Rhizophora* species is one among widely distributed predominant mangrove and its leaves sources of animal fodder [24,25]. Its protein content of 2.5%, chlorophyll 63%, dietary fiber 12%, vital components and vitamin were reported in the previous study [26]. The mangrove of Indonesia and Andaman and Nicobar are widely cultivated by the *Bruguiera* species. The high amount of tannin found in its hardwoods peels plays an important role in its antioxidant activity [27,28]. Its ratio of carbohydrates was reported at 29%, protein at 2%, fat at 1.5 and tannin at 13.47ppm and Its constituents well known applicable for animal feeds [29]. The salt tolerant members of the halophytic *Suaeda* live in salt marshes habitats, its seablite contains 13% of protein play an efficient nutritional role and contribute to the potential of animal feeds [30,31]. This study reveals the most desirable fodder especially *Avicennia, Rhizophora, Bruguirra, Sueada* and *Sesuvium*.

This review also state that the halophytic utilization of wetland is an effective and potential resources of cattle feed because, its contains essential nutrients such as protein, carbohydrates, lipids and, some important minerals such as selenium, manganese, copper and zinc also. The occurrence of importance components that activate the livestock production in terms of growth, development, and milk productions. In an halophytic ecosystems, adaptations towards to the ecotoxicology and climate changes have been mainly carbon storage, biodiversity conservation, soil conservation, sustainability, soil fertility and sustainable livestock utilization in the worldwide.

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