ABSTRACT

This study was conducted to determine the chemical composition and nutritive value of six plants species in Sistan namely *Cyperus longus*, *Lactuca seriola*, *Typha latifolia*, *Polygonum avicular*, *Cynanchum acutum* and *Desmostachy abipinnata*. After the collecting samples, compositions of plants were determined according to standard methods, its chemical composition include dry matter (DM), organic matter (OM), crude protein (CP), fat (EE), ash (ASH), cell wall (NDF) and cell wall without hemicllolose (ADF). The nylon bag technique was used for estimating of dry matter degradability for all plant samples. Organic matter digestibility and metabolisable energy were evaluated by *in vitro* gas production techniques. The results of chemical composition revealed that *Lactuca seriola* had the highest crude protein (22.54%) and *Desmostachy abipinnata* showed the highest NDF (79.65 %) and ADF (39.50 %). *Cynanchum acutum* exhibited the lowest NDF (26.73 %) and ADF (20.81 %). Accordinding to nylon bags method, *Lactuca seriola> Cyperus longus> Cynanchum acutum> Typha latifolia> Cynanchum acutum> Desmostachy abipinnata* showed the highest degradability, respectively. In the gas production technique, *Cyperus longus> Lactuca seriola> Polygonum avicular> Cynanchum acutum> Typha latifolia > Desmostachy abipinnata* revealed the highest gas production volume respectively. Results indicated that the cell wall constituents and dry matter degradation of these speci negative correlation. The reason can be the presence of anti-nutritional compounds and some lignin and secondary compounds in some of these plants. In all plants studied nutritive value are acceptable in terms of chemical composition and digestibility They can used as a part of the requirements for animals ration.
Keywords: Forage, Nutritive value, Digestibility, Gas production, Dry matter degradability

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Evaluation of nutritional quality of six species of forage plants in Sistan

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