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Using of silaged Azolla in Guilan male calves nutrition

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Azolla fern is an aquatic plant which is harvested in catchments fish pond, and has spread in paddy fields of some countries. This plant has been transported to Iran in recent decades and has spread in many rivers basin, especially in Anzali Lagoon. Azolla has a considerable high feeding value and could be used in animal nutrition. So with regard to shortage of animal feeds in Iran particularly Guilan province, approaching the technology required for changing Azolla into forage seems absolutely important. This experiment was conducted to evaluate the applied effects of Azolla silage on fattening calves diet in a completely randomized design with 4 treatments on 44 Guilan's male calves with a primary weight of 114 ±3 (kg) for five month. Azolla silage with the rate of 10 and 20 percent in two treatments and Alfalfa with the rate of 10 and 20 percent was included in calves' nutrition (according to dry matter). During this time calves were weighed once every two week, daily feed intake was measured and feed conversion ratio was computed too. At the end one third of calves were slaughtered to measure their carcass characteristics. Results showed that considering weight gain among treatments there are significant differences, treatment with 20 percent Azolla has significant difference with other treatments ($P<0.05$) according to Dancan test . Feed conversionatio (according to dry matter) and carcass characteristic had no significant differences among treatments ($P<0.05$). Finally it is concluded that applying 10%of Azolla silage in male calve diets may result in similar effects as alfalfa and could have economical justification.

Keywords: Azolla, Male Calves, Nutriton

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