



Effect of sowing time, cutting schedules and nitrogen levels on yield and quality of dual purpose oats (*Avena sativa* L.)

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Abstract

An experiment was conducted at Udaipur, (Rajasthan) during two consecutive *rabi* seasons of 2016-17 and 2017-18 to study the effect of sowing time, cutting schedules and nitrogen levels on grain productivity, quality, nutrient content and its uptake by oats. The treatments two dates of sowing (25th October and 25th November) and four cutting schedules (no cut, cut at 50, 60 and 70 DAS) were kept in main plots whereas three nitrogen levels (80, 100 and 120 kg ha⁻¹) were kept in sub plots and experiment was laid out in split plot design with three replications. Results indicated that 25th October sown oats registered significantly higher values for yield attributes and yields of grain (2.7 t ha⁻¹) and straw (6.6 t ha⁻¹). The sowing time had no significant influence on nutrient contents in grain and straw. Amongst cutting schedules, no cut schedule showed significantly higher values for all yield attributes and yields of grain (3.0 t ha⁻¹) and straw (7.4 t ha⁻¹), nutrient content and its uptake by grain and straw. Application of 120 kg N ha⁻¹ recorded significantly higher yields of grain (2.5 t ha⁻¹) and straw (6.2 t ha⁻¹), and nutrient uptakes. However, 100 kg N ha⁻¹ recorded at par values of all these attributes with treatment of 120 kg N ha⁻¹.

Keywords: Cutting schedule, Grain yield, Nitrogen levels, Nutrient uptake, Oats, Sowing time