Forage and grains yield in genotypes of dualpurpose wheat

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In Brazil, the use of winter cereals with dual purpose as wheat allows the supply of forage in the period of food lack in addition to grain production. The objective of this study was to evaluate the forage and grain yield in dual-purpose wheat genotypes in integrated crop-livestock systems. The experiment was conducted at Fepagro Forrrageiras in São Gabriel in a complete random block design with three replications. The genotypes used were promising lines PF 050411, PF 060140, PF 010066 and test cultivars BRS 277 and BRS Tarumã, all subjected to treatments without cuts, one cut and two cuts. Forage production was evaluated at 2.40 m² per plot when the plants reached 30 cm height. A sample of 400 g of green matter from each genotype was placed in forced ventilation oven at 60°C to constant weight to estimate the dry matter yield of forage. The grain yield was estimated at 2.40 m^2 in plots of treatments without cuts, one cut and two cuts. Data were submitted to analysis of variance and means were compared by Tukey test at 5% significance. The forage yield with one cut was not different between genotypes, however with two cuts PF 050411 strain had higher yield (2208.66 kg DM ha⁻¹) in relation to BRS 277 cultivars and BRS Tarumã. The PF 060140 strain and BRS 277 had the highest grain yields without cut. With one cut PF 050411 strain had the highest forage yield (4461.6 kg ha⁻¹) and BRS Tarumã the lowest forage yield (3546.3 kg ha⁻¹). With two cuts, the highest grain yield was in strain PF 010066 (3986 kg ha⁻¹), while the strains PF 060140 and PF 050411 and the cultivar BRS 277 did not differ in relation to grain yield. The results obtained with the dual purpose wheat are promising and emerge as a viable alternative to the implementation in sole forage crop, for the production of grain or dual-purpose (forage and grain).

Keywords: Triticum aestivum, integrated forage-crop systems, winter cereal