

USE OF FOLIAR FERTILIZER IN 'TANNAT' IN DOM PEDRITO REGION, RS - BRAZIL

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Context and purpose of this study – Within the nutritional management of vines, a fertilizer may contain one, two or more primary macronutrients, secondary macronutrients, and micronutrients. An obvious advantage of multi-nutrient fertilizers is the labor savings in the application, but it should also be considered that the nutrients will be applied while maintaining the same relationship between their concentrations. The latter advantage, however, is not always obtained for any product. Therefore, in the absence of work in the Dom Pedrito region with the product to be studied, the objective was to test the Biozyme® TF foliar fertilizer in the Tannat cultivar.

Material and methods - The study was carried out by the Nucleus of Study, Research and Extension in Enology (NEPE²), of the Bachelor's Degree in Oenology of UNIPAMPA. The experiment was conducted in the 2017/2018 cycle, with cv. Tannat grafted on the rootstock 'SO4', in a private vineyard in the region of Dom Pedrito, RS, four years old, conducted in the double "Guyot" system. Biozyme® TF foliar fertilizer was tested, consisting of: Nitrogen (N) 1%; Potassium oxide (K₂O) 5%; Boron (B) 0.08%; Iron (Fe) 0.40%; Manganese (Mn) 0.1%; Sulfur (S) 1%; Zinc (Zn) 2% and Organic Carbon 3.5%. The experiment consisted of 4 treatments, with 2 replicates with 7 seedlings per replicate, totaling 14 vines per treatment, and 56 vines for the whole experiment. The treatments were applied from stage 17, according to the Eichhorn and Lorenz Scale (1977) of the cultivar: T1 = Four applications of distilled water in the whole plant; T2 = An application of mineral fertilizer only in the bunch at the recommended dose (500 mL ha⁻¹); T3 = Two applications biweekly on the whole vine at the recommended dose (500mL ha⁻¹) and; T4 = Four applications in whole vine at the recommended dose (500 mL ha⁻¹). During the experiment and until the harvest the fruit maturation was followed, through collection of berries in three occasions during the maturation period of the grape; in the harvest the morphological variables of the bunch and the fruit were evaluated and the physical-chemical characterization of the berries. The data were submitted to the Tukey averages comparison test at 5% probability.

Results – Under the conditions of the present experiment, the mixed mineral fertilizer tested did not contribute to an improvement in the variables analyzed in the fruit and in the 'Tannat' must.

Key words: *Vitis vinifera* L., Mineral Nutrition, Viticulture.

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