Withering of the ‘Moscato giallo’ grapes under covered space

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For the purpose of producing predicate wines in northern part of Croatia, grapes are traditionally left on the vine unpicked. However, grapes on the vine are exposed to unfavorable environmental conditions that affect rapid rotting and attacked by birds. To eliminate the mentioned risks, the grapes can be picked and placed in a protected space (loft, greenhouse, etc.) suitable for drying. This study presents the results of research on withering grapes of the 'Moscato giallo' variety in two tretment: sun drying (under covered terrace) and drying in the shade (loft). The following quality parameters were monitored: mass of grapes, sugar concentration, content of total acids, pH, content of organic acids. The total sugar content was determined refractometrically, the acid content was determined by neutralization with 0.1M NaOH and bromo-thymol as an indicator of pH change, the analysis of organic acids was carried out on an HPLC device. The research proved that in both treatment weight of the grapes and concentration of tartaric acid decreased during withering, while the concentration of sugar, malic acid, citric acid, and the content of total acids increased. Process of withering was shorter in sun drying treatment. Also, final concentration of sugar was higher in sun drying treatment. Final concentration of total acids, tartaric and malic acid was higher by drying in shade.

Keywords: withering, Moscato giallo, sun drying, shade drying, organic acids