ENOLOGICAL CHARACTERS OF THIRTY VINES IN FOUR DIFFERENT ZONES OF TUSCANY

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In the last few years the development of HPLC techniques together with multivariate statistical methods allowed to set methodics of large discriminant and classing efficacy in the study of winegrapes.

The phenolic compounds (cynnamic acids and anthocyanidins) in thirty different wines grown in 4 different zones of Tuscany (Arezzo, Grosseto, Pisa and Lucca) have been analyzed by HPLC.

The analytical data were statistical worked out by two analysis ACP and a linear discriminant analisys in order to discriminate the four zones, using Fisher linear function.

The stepwise technique, to choose variables, pointed out the delphinidin-g, the peonidin-g, the ratio of three/two-sostituited anthocyanines, the sum of cis and trans-cutaric acids, the caffeic acid and the ratio of caffeic acid and the sum of cutaric acids among the most important.

Then we worked out 6 comparisons between two zones and exactly AR/LU, AR/PI, AR/GR, LU/PI, LU/GR and PI/GR.

The environment discriminant threshold, the differences, the discriminant functions of vine-variety in every zone and the measure of discrimination errors were obtained.

Therefore a vinevariety-environment interaction is quite probable.