Ovidius University Annals of Chemistry Volume 19, Number 1-2, pp.45-49, 2008

Vitamin C determination in Murfatlar grapes in the ripening period

Nicoleta MATEI

Ovidius University, Department of Chemistry, 124 Mamaia Blvd, Constantza 900527, Romania

Abstract The objective of the present work was to determine vitamin C (ascorbic acid, AA) from four varieties of grapes in the ripening period in order to observe the influence of climacteric conditions on vitamin C concentration. The vitamin C concentration was measured by titrimetric and spectrophotometric methods and the obtained data were compared using the t-test. The procedures were successfully applied for the determination of ascorbic acid in some red and green grapes (*Vitis vinifera*) from Murfatlar vineyard in 2007 and 2008 years. The varieties of studied traditionally grapes were: Chardonnay, Pinot Gris, Pinot Noir and Muscat Ottonel. The values of vitamin C concentration ranged from 0.4133mgAA/100g to 2.1104mgAA/100g in grapes collected in 2007 and respectively from 0.521mgAA/100g to 3.5462 mgAA/100g in grapes collected in 2008. It was observed that after the rain the vitamin C concentration was decreased in 2007 except Pinot Noir red grapes but in 2008 the decrease was no significant due maybe to the fact that the temperature in the period of vintage was lower.

Keywords: ascorbic acid, grapes, Murfatlar vineyard, spectrometry, titrimetry

ISSN-1223-7221