Title Influence of water activity and temperature on growth of isolates of Aspergillus section Nigri obtained

from grapes

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Citation International Journal of Food Microbiology, Volume 96, Issue 1, 1 October 2004, Pages 19-27

Keywords Water activity; Temperature; Solute; Aspergillus section Nigri; Growth; Grapes

Abstract

The effects of water activity (a_w) and temperature on growth of *Aspergillus* section *Nigri* isolated from wine grapes were investigated on an agar medium with composition similar to that of grapes. Temperatures in the range of $10\text{--}37\,^{\circ}\text{C}$ were tested. Optimum temperatures for growth were between 30 and 37 $^{\circ}\text{C}$. Water activity levels ranging from 0.90 to 0.995 were tested. Optimum a_w for growth was 0.98 in most cases. Statistical differences were found among the groups tested (*A. carbonarius*, *A. niger* aggregate and *A.* section *Nigri* uniseriates). Growth rates models for the factors assayed have been obtained.