

Yeasts Associated to Spontaneous Date Vinegar Process

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Abstract : Current consumer trends go towards natural products defined as the products obtained by a traditional manufacturing method. Vinegar is one of those products marketed; it may be industrially obtained by a submerged (fast) or traditional (slow) processes. The latter exhibited a high quality because of its complex microbiological transformations (or two-stage fermentation) by the native must flora. Moreover, although that Acetic acid bacteria have traditionally been considered to play the leading role in vinegar production, some studies have recently highlighted that also yeasts metabolism can affect traditional vinegar chemical properties in a remarkable way. Thus, the aim of this study was to monitor a traditional slow process of vinegar as applied in the south of Algeria using date with hard texture (Degla-Beida variety) to isolate and identify the involved yeasts in order to select them as starter culture. Phenotypic and molecular analysis show that the non-Saccharomyces were the main yeasts species isolated throughout the alcoholic spontaneous fermentation and they included *Hanseniaspora guilliermondii* and *Torulaspora delbrueckii*.

Keywords : date vinegar, traditional production, yeasts, Phenotypic, Algeria

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