

Title Comparative production of different melon distillates: Chemical and sensory analyses
Author Luis F. Hernández-Gómez, Juan Úbeda-Iranzo, Esteban García-Romero and Ana Briones-Pérez
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Abstract

Melon (*Cucumis melo* L.) fruits were crushed under different conditions, and the juice, pulp, and pastes obtained were fermented at two different pH levels (unadjusted and adjusted), at a pilot plant, to give an alcoholic content of 2.0–3.3% (v/v). The melon wines were double-distilled, the first distillation being in a reflux still, "alquitara", producing a distillate with an alcohol content between 18.5% and 25% (v/v). The second distillation took place in an alembic still, yielding a final alcohol content of 58–69% (v/v). Sixty volatile compounds were analysed by GC, and sensory evaluations were performed. The distillate made from one of the three substrates tested was rejected on the basis of the chemical and sensory analyses. The remaining distillates, from the other two substrates, were so similar that there were no preferences between them. Fermentation pH proved to be critical for the production of certain compounds (e.g., ethyl acetate and ethyl lactate) and hence for the sensory attributes of the final product. The melon distillates were compared with other commercial spirits.