

Recreating ancient recipes, and winemaking techniques in a modern-day context: roses, citrus leaves and amphorae

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The project

- The aim of this study was to review the wine in Ancient times
 - Origin
 - Equipment
 - Sensory profile
- Apicius' *De re Coquinaria* recipes in modern-day context
- Pilot project: ancient winemaking practices, and flavoured wine

Apicius' recipes

“Make rose wine in this manner: rose petals, the lower white part removed, sewed into a linen bag and immersed in wine for seven days. Thereupon add a sack of new petals and replace them by fresh ones for another week then strain the wine through the colander. Before serving, add honey sweetening to taste. Take care that only the best petals free from dew be used for soaking.”

“Rose wine without roses is made in this fashion: a palm leaf basket full of fresh citrus leaves is immersed in the vat of new wine before fermentation has set in. After forty days retire the leaves, and, as occasion arises, sweeten the wine with honey, and pass it up for rose wine”

Aroma compounds

Table 1 – Aroma compounds found in *Rosa* genus. Also noted is if the compound is also found in *Citrus* leaves, highlighting the potential of a similar sensory and aroma profiles (Al-Aamri, et al., 2018); (Lota, et al., 2002); (Zhao, et al., 2016)

Compound	Odour Descriptors	Found in
β -Myrcene	Pleasant, light balsam scent	Rose & Citrus
D-Limonene	Similar to lemon	Rose & Citrus
Linalool	Lilac, Lily, Rose flower, woody	Rose & Citrus
Citronellyl acetate	Fresh Fruit, Lemon	Rose & Citrus
Heptadecane		Rose
α-Terpineol	Clove aroma	Rose & Citrus
Citronellol	Sweet rose	Rose & Citrus
Nerol	Rose, orange blossom, lemon	Rose & Citrus
Geraniol	Sweet rose aroma	Rose & Citrus
β-Phenyl ethyl alcohol	Rose Aroma	Rose
Nerolidol	Orange blossom, rose, lily, apple blossom	Rose & Citrus
Methyl eugenol	Clove-fennel aroma	Rose
n-Heneicosane		Rose
Nonadecane		Rose
Eugenol	Clove	Rose
Rose oxide	Floral, roses, fresh bay leaves	Rose

Results from the research

- Ancient wine, as drunk in the Mediterranean, is not worth replicating exactly. It was most likely faulty, young, sweet and high in alcohol
- Wine legislation would need to be considered
- Further research into amphorae ageing for UK still wine
- Aroma compounds in roses and citrus leaves showed similarity enough to infer matching aromas