Apple wine

Recipe No. 13. About 10 l of prepared liquid, yielding about 8–9 l of wine. Yields and timings are approximate.

Making your own wine preserves fruit aromas and develops your winemaking hobby. We ferment the prepared liquid without skins or seeds.

What are we aiming for?

A dry wine of approximately 11.5–13.5% alcohol. Fermentation usually takes 2–4 weeks; clearing and ageing 4–8 months. Measurements and taste determine each stage.

Ingredients

• 15–20 kg of sound, ripe fruit.

• Approximately 0.9–1.4 kg of sugar; determine the final amount after measuring.

• 1 sachet of ALCOMAT Fruit Wine Yeast HAT, 5 g.

• 1 sachet of ALCOMAT Nutri-Duo, 10 g.

• Pectolase and PIRO Ferm according to their instructions.

• For rehydration: 25 ml of water and 25 ml of must.

Do not add water to the main batch. Dissolve sugar in juice.

Use whole sachets of yeast and ALCOMAT Nutri-Duo. Measure other additives separately.

Equipment

• A food-grade fermenter of about 15 l for 10 l of prepared liquid, with a lid and airlock; leave room for foam.

• A food-grade vessel of 20–25 l for preparing and processing fruit before separating the liquid.

• A fruit press or straining bag to separate juice from pulp.

• A fruit mill for preparing fruit before pressing.

• A vessel fitted with an airlock for continued fermentation and smaller vessels matched to the volume during ageing.

• A hydrometer with a test cylinder and a thermometer.

• A pH meter and an acidity test kit.

• Scales and equipment for measuring additives accurately.

• A siphon tube and products for cleaning and sanitising equipment.

• Wine bottles and suitable closures.

1. Select and prepare the fruit

Choose sound, ripe, aromatic fruit. Discard mouldy and rotten fruit completely. Wash and drain.

Wash fruit and remove stalks and debris. Peeling and removing entire cores are unnecessary. Avoid crushing seeds. Mill and immediately press about 10 l of juice with some extra to spare.

2. Prepare the equipment and juice

Clean and sanitise the equipment. Do not blend the fruit into a smooth purée or boil it.

Press gradually, retaining the juice and removing larger pieces of fruit. The juice need not be perfectly clear.

3. Add PIRO Ferm and Pectolase

Mix the liquid, take a strained sample and measure pH. Add PIRO Ferm at a dose appropriate to its instructions and the must pH. Mix thoroughly. Do not automatically use the whole sachet.

Preferably allow about 12 hours before adding Pectolase, unless the label states otherwise. Keep the must covered and cool while waiting.

Add Pectolase according to its instructions. Observe the specified treatment time and temperature. The enzyme helps release juice and makes subsequent clearing easier.

Usually add yeast about 24 hours after PIRO, also following the enzyme instructions. Waiting alone does not remove an excessive sulphite dose.

4. Separate sediment or fruit

After enzyme treatment, let coarse sediment settle and rack off it. For white grapes, allow 12–24 hours of settling at about 8–12 °C.

Measure the liquid obtained. Slight cloudiness is acceptable. Ferment without skins and seeds.

5. Prepare 10 l and adjust the parameters

Prepare about 9 l of juice. Dissolve sugar in a separate portion, add it gradually, then top up with prepared juice to 10 l.

Approximate target: 20–22 °Brix, gravity 1.083–1.092. Measure again after topping up.

Measure acidity and pH. An approximate starting point is 6–8 g/l titratable acidity expressed as tartaric acid. Check your kit's units; pH is a different parameter.

Choose any adjustment after measurements and a small trial. With apple juice, first consider blending varieties with different acidity. Do not dilute without limits.

Record the final volume, gravity and quantities of additives.

6. Add nutrient and yeast

Bring the must to about 18–20 °C.

Dissolve the whole 10 g sachet of ALCOMAT Nutri-Duo in a small portion of must. Pour into the fermenter and mix.

In a separate sanitised vessel, combine 25 ml of water and 25 ml of prepared must at 25–30 °C.

Add the whole 5 g sachet of ALCOMAT Fruit Wine Yeast HAT and leave for about 20–25 minutes, following the product instructions.

Gradually add small portions of liquid from the fermenter to bring the prepared yeast closer to the must temperature. Pour in the yeast and mix gently.

Add nutrient to the must, not to the yeast rehydration liquid. Close the fermenter with an airlock and leave room for foam.

7. Ferment

Maintain a stable temperature of about 18–20 °C. If there are no signs of activity after 48–72 hours, check temperature and measure gravity. Falling gravity confirms fermentation.

After about two weeks, begin checking for completion. Gently degas the sample and account for the hydrometer's calibration temperature. Do not return the sample to the batch.

Take three readings at intervals of 2–3 days, keeping the batch at fermentation temperature. The result should remain unchanged and indicate completed fermentation.

In dry wine, gravity often falls below 1.000, but one reading does not confirm the end of fermentation.

If the reading stops significantly above the expected level, check for a stalled fermentation. Lack of airlock bubbles is not sufficient confirmation.

8. Rack the wine off the sediment

After fermentation has finished and coarse sediment has settled, siphon into a clean, sanitised vessel. Do not draw up the sediment.

Minimise splashing and contact with air. Choose a vessel that leaves little headspace above the wine. Continue to use an airlock.

Adjust PIRO Ferm protection according to the product instructions, pH and free SO_2 level, if measured.

9. Leave to clear and age

Keep the wine in a cool, dark place. Rack when noticeable sediment forms rather than to a fixed timetable. Allow 4–8 months; postpone bottling if further clearing is needed. Ageing does not replace correction of excessive acidity.

10. Bottle the wine

Bottle when the wine is clear, fermentation has finished and its parameters are stable. Use clean, sanitised bottles and suitable closures. Minimise air contact.

This recipe produces a dry wine. For an off-dry or medium-sweet version, plan a separate sweetening stage and suitable stabilisation. Do not add sugar immediately before bottling without protection against renewed fermentation. PIRO alone does not guarantee protection of sweetened wine.

How can you estimate alcohol content?

If no sugar or water was added after the original reading, use this approximation:

Alcohol [% vol.] ≈ (original gravity − final gravity) × 131.

Example: (1.087 − 0.995) × 131 ≈ 12.1% alcohol.

The result is approximate. Use the measurement taken after adjustments and before adding yeast.

Frequently asked questions

How do I prepare this fruit? Wash and remove stalks and debris. Peeling and removing entire cores are unnecessary. Avoid crushing seeds. Mill and immediately press about 10 l of juice with some extra to spare.

Do we ferment skins and seeds? No. We ferment only the prepared liquid.

Can I use frozen fruit? Yes, without added sugar. Thaw in a clean vessel and retain the juice. Measure the actual yield.

Is acid needed? Only after measurements. Astringency is not acidity.

Can young wine be astringent? Yes. Gentle pressing and ageing help, but do not remove every fault.

Do I use whole sachets of yeast and nutrient? Yes. Use the whole 5 g sachet of the specified yeast and the whole 10 g sachet of ALCOMAT Nutri-Duo. Measure other products separately.

Do I add all the sugar at once? Do not add it automatically. Add gradually and check measurements before fermentation.

Does 10 l of must mean adding 10 l of water? No. Juice is the basis of this batch. Do not add water to the main batch; dissolve sugar in juice.

The airlock is not bubbling — has fermentation failed? Check gravity and temperature. Falling gravity confirms fermentation even if gas escapes through a leak.

How do I recognise the end of fermentation? Take three gravity readings at intervals of 2–3 days. They should be stable and show that the sugar has fermented. An unusually high result requires investigation.

Can I use a refractometer? Once alcohol is present, the reading needs appropriate correction. A hydrometer is easier for beginners.

Why is the wine not sweet despite added sugar? Yeast converted the sugar into alcohol. Sugar added before fermentation is for strength, not a guarantee of sweetness.

The wine remains cloudy — is it spoiled? Cloudiness alone does not mean spoilage. Give the wine time, assess its aroma and surface, and identify the cause before using another treatment.

Sediment has formed at the bottom — is this normal? Yes. Yeast and fruit components settle. Rack off noticeable sediment while minimising air contact.

Mould has appeared on the surface. What should I do? Do not taste or bottle this batch — discard it.

What affects flavour most? Ripe fruit, appropriate acidity, gentle pressing and stable temperature. Record varieties, yield and measurements. Making wine is enjoyable and can begin a rewarding hobby.