Red grape wine

Recipe No. 1 — for about 10 l of liquid must, yielding about 8–9 l of dry wine

Making red grape wine is an excellent introduction to winemaking. Ripe fruit, suitable yeast and patience produce a wine with natural colour, fruity aromas and a character shaped by the grape variety.

In this recipe, crushed grapes ferment with their skins. The skins provide most of the red colour and some of the wine's structure. We then separate the liquid from the fruit and let fermentation finish before ageing the wine.

What are we aiming for?

• A dry red wine with a fruity character.

• Approximate strength: 12–13.5% alcohol, depending on the initial sugar level and attenuation.

• Liquid must volume: about 10 l, excluding the volume of skins and seeds.

• Finished wine: about 8–9 l, depending on pressing, sediment and racking losses.

• Fermentation on the skins: approximately 5–7 days.

• Total fermentation time: usually 2–4 weeks.

• Clearing and ageing: usually 6–12 months.

These timings are approximate. Measurements, taste and the condition of the wine determine when to move to the next stage.

Ingredients

• Approximately 15–18 kg of ripe, sound red grapes — adjust the amount to the fruit's juice yield to obtain about 10 l of liquid after separating the skins. Less efficient pressing may require more fruit.

• 1 whole sachet of ALCOMAT Red Wine Yeast HAT — 5 g.

• 1 whole sachet of ALCOMAT Nutri-Duo nutrient with vitamin B1 — 10 g.

• ALCOMAT Pectolase — dose according to the product instructions for use with crushed grapes.

• ALCOMAT PIRO Ferm — dose according to the instructions, pH and stage of winemaking.

• Sugar, only if measurements show that additional sugar is needed.

• To prepare the yeast: 25 ml of drinking water and 25 ml of prepared must.

This recipe uses a whole sachet of yeast and a whole sachet of ALCOMAT Nutri-Duo. Measure Pectolase and PIRO Ferm separately according to their instructions.

Do not automatically add sugar or water. The wine is based on the grapes' natural juice.

Equipment

• A food-grade fermenter of about 25–30 l for fermentation with fruit, with room for pulp and foam and a way for gas to escape.

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

• A clean tool for submerging the fruit cap during fermentation.

• 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 the grapes and remove the stems

Choose ripe, aromatic grapes. Varieties intended for winemaking work best.

Discard mouldy, rotten and unripe fruit. Do not use mouldy grapes after merely removing visible mould.

Remove the berries from the stems. Stems can introduce green, bitter and excessively astringent notes.

If the fruit needs washing, rinse it briefly with drinking water and drain well. Do not soak it for long.

2. Clean the equipment and crush the fruit

Thoroughly clean and sanitise the equipment according to the instructions for the product used.

Gently crush the grapes to split the skins and release the juice. Keep all the liquid.

Do not blend the fruit into a smooth purée or crush the seeds. Broken seeds can increase bitterness and astringency.

Transfer the crushed grapes and juice to the fermenter. Leave about one third of its capacity free for floating skins and foam.

3. Check sugar, acidity and pH

Mix the crushed grapes thoroughly. Take a representative juice sample, strain it and measure specific gravity and pH. Record the results.

For this recipe, aim for approximately 21–23 °Brix, corresponding to an original gravity of about 1.087–1.096.

If the grapes contain enough sugar, do not add more. If sugar is too low, add it gradually, dissolving it in a portion of the must and measuring again.

Do not raise the sugar level above the chosen target simply to make a stronger wine.

Also check acidity. The sweetness of the must can mask it. If adjustment is needed, base it on measurements and the instructions for the winemaking product used.

Do not dilute the must with water solely to increase the volume of wine.

4. Add PIRO Ferm and Pectolase

Add PIRO Ferm at a dose appropriate to the product instructions and must pH. Mix thoroughly.

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

Add Pectolase according to the product instructions. The enzyme helps break down pectin, release juice and improve subsequent clearing.

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

5. Add nutrient and prepared yeast

Bring the must to about 22–25 °C.

Dissolve the whole 10 g sachet of ALCOMAT Nutri-Duo in a small portion of must. Add to 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 Red Wine Yeast HAT and leave for about 20–25 minutes, following the product instructions.

Gradually add small portions of must 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 liquid used to rehydrate the yeast.

Cover the fermenter or fit a lid with an airlock. Gas must be able to escape.

6. Ferment on the skins

Keep the must at about 22–25 °C. Measure the temperature of the crushed grapes — during fermentation it may exceed room temperature.

The skins will rise to the surface, forming a cap.

Gently submerge the cap two or three times a day with a clean, sanitised tool. Wet the entire layer of skins and do not let it dry out.

Allow approximately 5–7 days of skin contact from the start of active fermentation. Monitor the fall in gravity, temperature, aroma and the taste of a strained sample.

If fermentation finishes sooner or the wine becomes too astringent, separate the skins earlier. Do not leave finished wine on the fruit just to reach a set number of days.

7. Separate the wine from the skins

Drain the free-run liquid, then gently press the remaining pulp in a press or straining bag.

Do not try to extract every last drop. Heavily pressed wine may be more astringent — collect it separately and assess it before blending.

Measure the liquid obtained. About 10 l is the target for this recipe, but the actual yield depends on the fruit and pressing method.

Transfer the liquid to a clean fermenter with an airlock. If fermentation is still vigorous, leave space for foam.

Do not automatically make up any shortfall with water.

8. Let fermentation finish

Maintain about 20–24 °C until the yeast has finished working.

Monitor specific gravity with a hydrometer. Gently degas the sample before measuring and account for the instrument's calibration temperature. Do not return the sample to the must.

In dry wine, gravity often falls below 1.000, but a single reading does not confirm that fermentation has finished.

Take three readings at intervals of 2–3 days. The result should remain unchanged and indicate that the sugar has fermented.

If gravity stops significantly above the expected level, check whether fermentation has stalled.

9. Rack the wine and leave it to age

After fermentation has finished and the coarse sediment has settled, siphon the wine into a clean, sanitised vessel.

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.

Keep the wine in a cool, dark place. Rack again when a noticeable sediment forms rather than racking frequently without need.

Allow about 6–12 months for ageing, choosing the bottling date according to clarity and taste.

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 aeration during bottling.

This recipe produces a dry wine. For an off-dry or medium-sweet version, a separate sweetening stage and suitable stabilisation are needed. Do not add sugar immediately before bottling without protection against renewed fermentation.

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: (1.090 − 0.995) × 131 ≈ 12.4% alcohol.

When fermenting crushed fruit, the result is approximate because obtaining a representative sample is harder than with juice alone.

Frequently asked questions

Can I use grapes from my garden? Yes, if they are sound and ripe. Check sugar, acidity and flavour. Not every table grape variety gives the same colour and structure as a wine grape.

Must I remove the stems? Yes, for this recipe. This helps reduce green, bitter and excessively astringent notes.

Must I remove the seeds? Intact seeds do not need removing. Avoid crushing them during crushing and pressing.

Why ferment with the skins? They provide red colour, aroma and tannins that contribute to the wine's structure.

Must I add sugar? Only if measurements show that natural sugar is insufficient for the intended strength. Do not add it automatically.

Can I add water to make more wine? We do not recommend it in this recipe. Water dilutes colour, aroma, acidity and structure.

Do I use whole sachets of yeast and nutrient? Yes. This recipe uses a whole 5 g sachet of Red Wine Yeast HAT and a whole 10 g sachet of ALCOMAT Nutri-Duo. Measure Pectolase and PIRO Ferm separately.

The skins are floating — is this normal? Yes. Fermentation gas lifts them. Submerge this layer two or three times daily so it does not dry out.

The airlock is not bubbling — has fermentation failed? Check gravity and temperature. If gravity is falling, fermentation is continuing even if gas escapes through a lid leak.

How do I recognise the end of fermentation? Take three gravity readings at intervals of 2–3 days. They should be stable and indicate that the sugar has fermented. Lack of bubbles alone is not enough.

Can I monitor fermentation with a refractometer? Once alcohol is present, its reading needs an appropriate correction. A hydrometer is easier for beginners.

The wine is astringent — is this a fault? Young red wine can be astringent. Ageing often softens it. Unripe fruit, damaged seeds, heavy pressing or prolonged skin contact can increase excessive astringency.

Why is the wine not sweet when the grapes were sweet? The yeast converted sugar into alcohol. This recipe produces a dry wine.

Sediment has formed at the bottom — is this normal? Yes. Yeast and other wine components settle during fermentation and ageing. 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? Grape ripeness, variety, suitable acidity, fermentation temperature and gentle pressing. Unhurried ageing is equally important, allowing fruit aromas and structure to come together.

Record the variety, fruit quantity, measurements and observations. This makes it easier to adapt the next wine to your taste.

Making wine is enjoyable and brings the satisfaction of turning fresh fruit into a distinctive drink. Your first batch can begin a rewarding hobby with new experiences each season.