**Stable isotope analyses of the wine samples by the respective stable isotope laboratories**

**Austrian and Montenegrin samples:**

For 13C analysis the distilled alcohol samples from Austria and Montenegro were inserted into and combusted in an elemental analyzer (Carlo Erba, Trieste/Italy) and the produced gas flushed via a continuous helium flow into a Finnigan delta 253 isotope mass spectrometer for the analysis of the carbon isotope ratio (e.g. Horacek et al., 2008). Oxygen isotope analysis was carried performed by dual inlet method of a Delta plus isotope ratio mass spectrometer (ThermoFisher, Bremen/Germany) connected to a water equilibration unit (e.g. Papesch & Horacek 2009).

**Slovenian samples:**

The Slovenian samples were analyzed for their carbon isotope ratio using an Europe Scientific 20-20 continuous flow mass spectrometer with an ANCA-SL solid-liquid preparation module and the samples were inserted by packing them in tin capsules. The oxygen isotope ratio was measured after equilibration with reference CO2 at 25°C for 24h using a Varian 500 (Finnigan, Bremen/Germany) isotope ratio mass spectrometer.

**Romanian samples:**

For 𝛿13C determinations the wine samples were distilled using a column with rotating teflon band (Micro Spinning Band Column – NORMAG). The alcoholic strength was determined using an electronic densitometer (Rudolph Research DDM 2910), and the obtained alcohol concentrations were ≥95 % (v/v) and ≥92 % (m/m) for all samples.

For δ13C measurement, 8 µl of ethanol were combusted at 550°C (3 h) in a Nabertherm oven, Germany. The resulted CO2 after combustion, was purified from other combustion gasses by cryogenic separation.

For 𝛿18O determination, the equilibration of CO2 with the wine water was performed using the off-line preparation method. Tus, 5 mL of the wine sample were transfered into a calibrated sample bottle and cooled down to −80∘ C. After venting the bottle, the carbon dioxide was introduced at a pressure around 600 Torr, then the bottle being placed into a thermostatically controlled water bath (25°C). The isotopic equilibrium was reached overnight (around 16h). After the equilibration step, the carbon dioxide was extracted and cryogenically purified.

Both determinations, 𝛿18O and 𝛿13C were performed using the dual-inlet method by a Delta V Advantage Isotope Ratio Mass Spectrometer (ThermoFinnigan, Bremen, Germany). All samples were measured in duplicates. Details are described in Magdas et al., 2012.

**Argentinian samples:**

The Argentinean samples were measured for carbon isotopes by injecting the alcohol in a Flash HT elemental analyzer (ThermoFisher, Bremen/Germany) and the produced gas is flushed by continuous helium flow into a Delta V IRMS (ThermoFisher, Bremen/Germany). The oxygen isotope values were measured by equilibration method in a gas bench (ThermoFisher, Bremen/Germany) and the equilibrated CO2-gas is flushed by continuous gas flow into a Delta V IRMS (ThermoFisher, Bremen/Germany).