

Supplementary Materials

Thermal behavior and multi-characterization of calcium-oxalate phytoliths crystals from grapevine

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Figure S1

Photograph showing the various parts of the studied grapevine (*Vitis vinifera*) and their length. Yellow dashed lines indicate where the parts were separated from each other

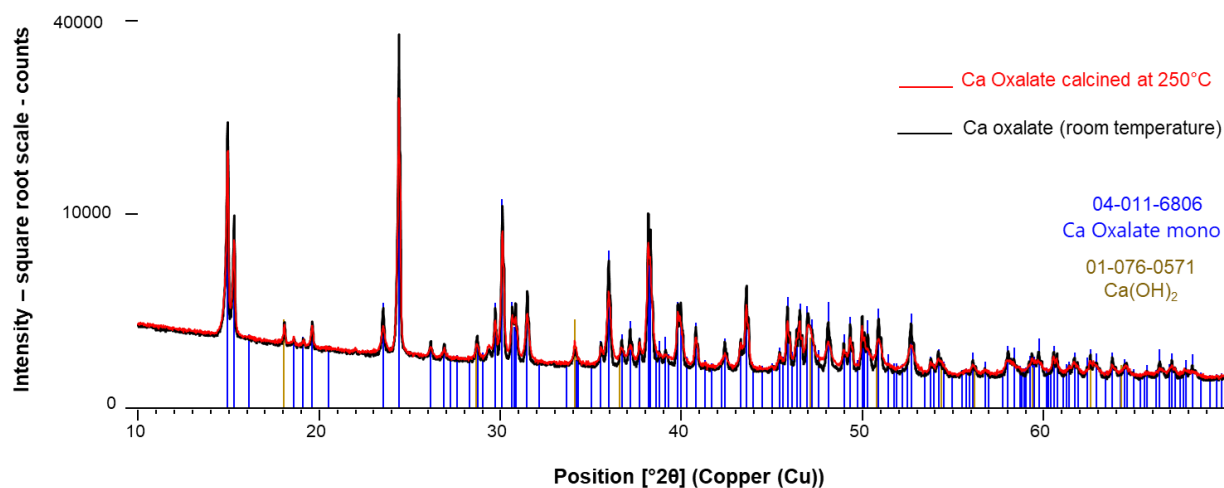


Figure S2

XRD patterns of the purchased Ca-oxalate material and its residual after calcination at 250°C in a muffle furnace. The blue vertical lines correspond to the XRD peaks of Ca-oxalate monohydrate (International Centre for Diffraction Data [ICDD] Ref.# 04-011-6806), the tan-colored vertical lines to the peaks of Ca-hydroxide (ICDD Ref.# 01-076-0571).

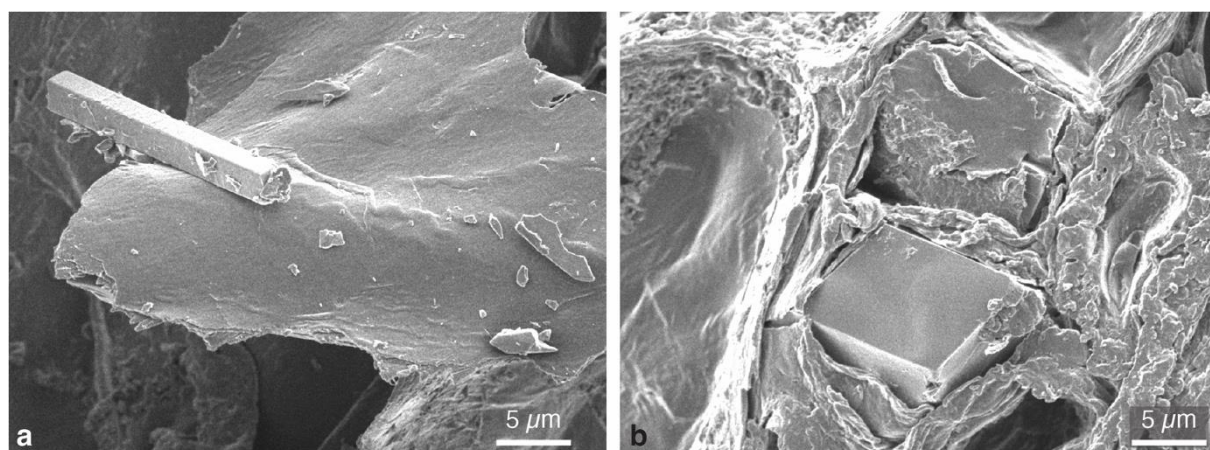


Figure S3

Washed grapevine trunk. SEM images showing **a)** a prismatic Ca-oxalate crystal; **b)** two rhombohedral Ca-oxalate crystals embedded in the organic matrix of the trunk.

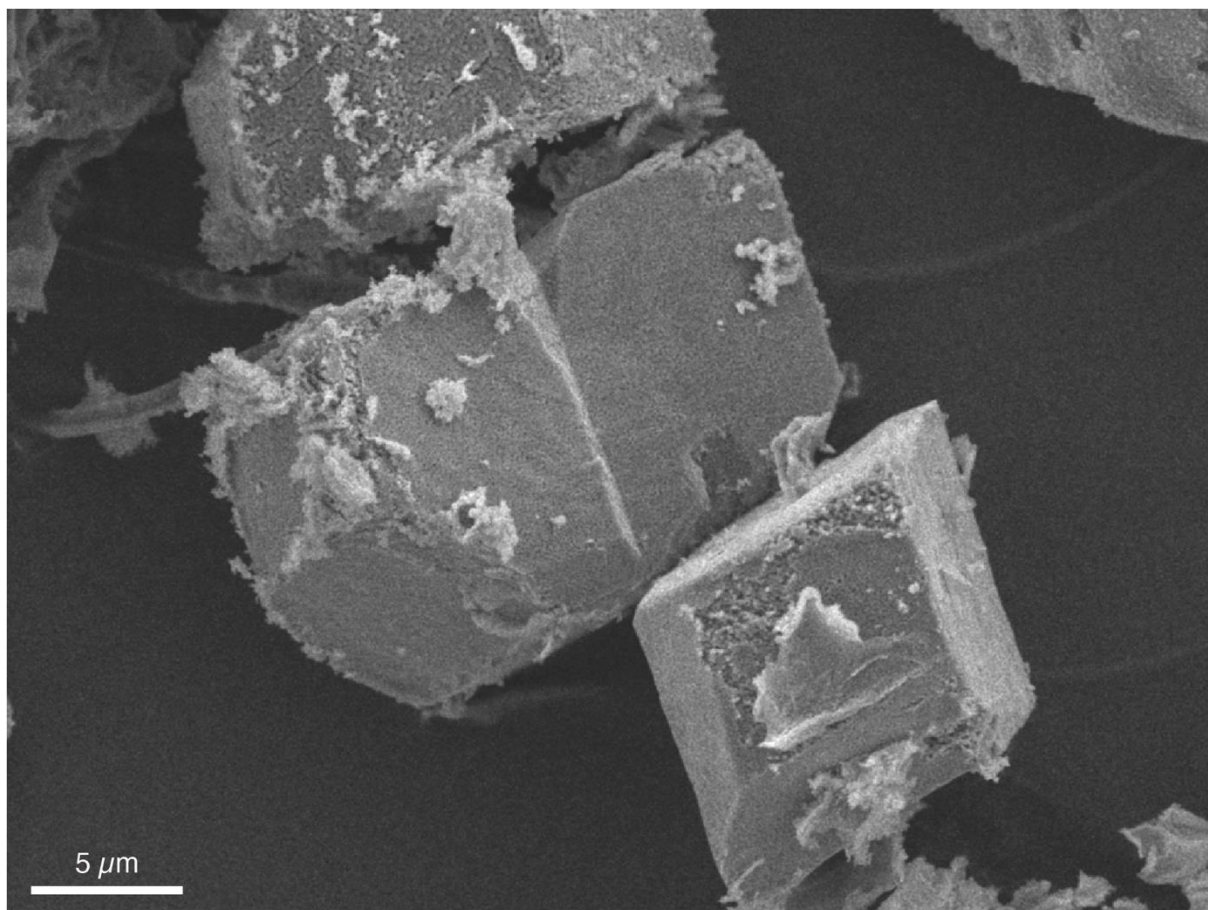


Figure S4

SEM image of grapevine root calcined at 250 °C showing Ca-oxalate crystals with the typical surface modifications, which are analogous to those observed for calcined grapevine bark (Fig. 6 in Main Text).

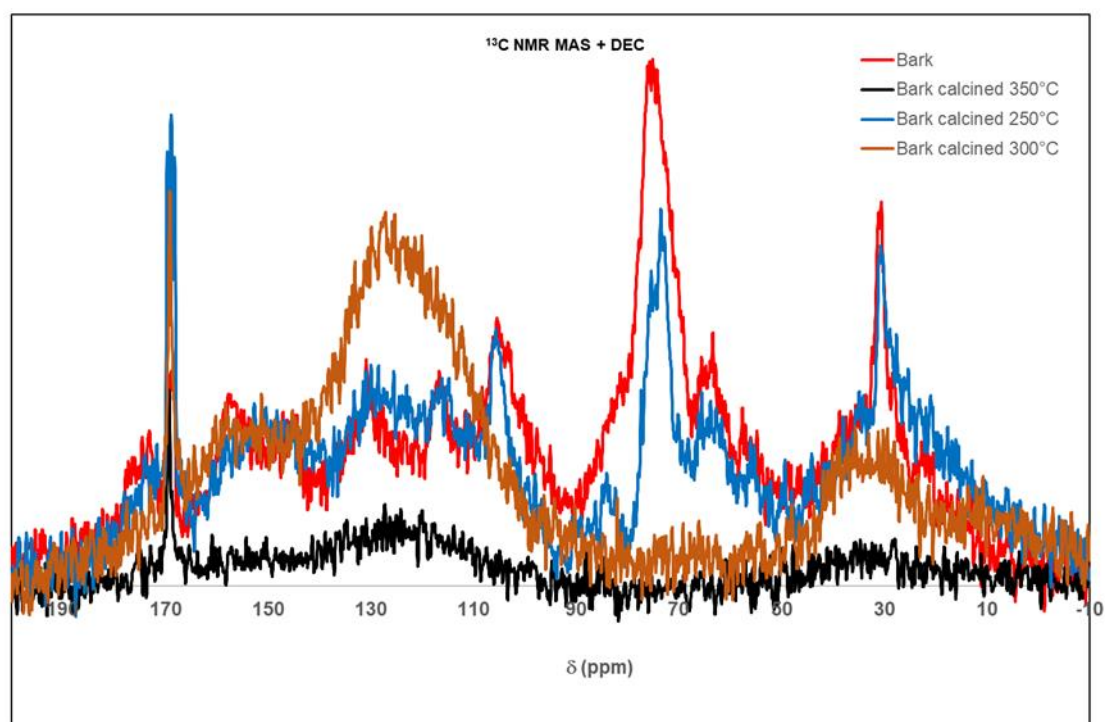


Figure S5

^{13}C NMR MAS + DEC spectra of the grapevine bark and of the residual ashes after calcination at various temperatures