Unusual perforations in phlogopite crystals from Caldara di Manziana (Italy) caused by sulphuric acid generated by microbial oxidation of H_2S emanations

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Supplementary Material

a

b

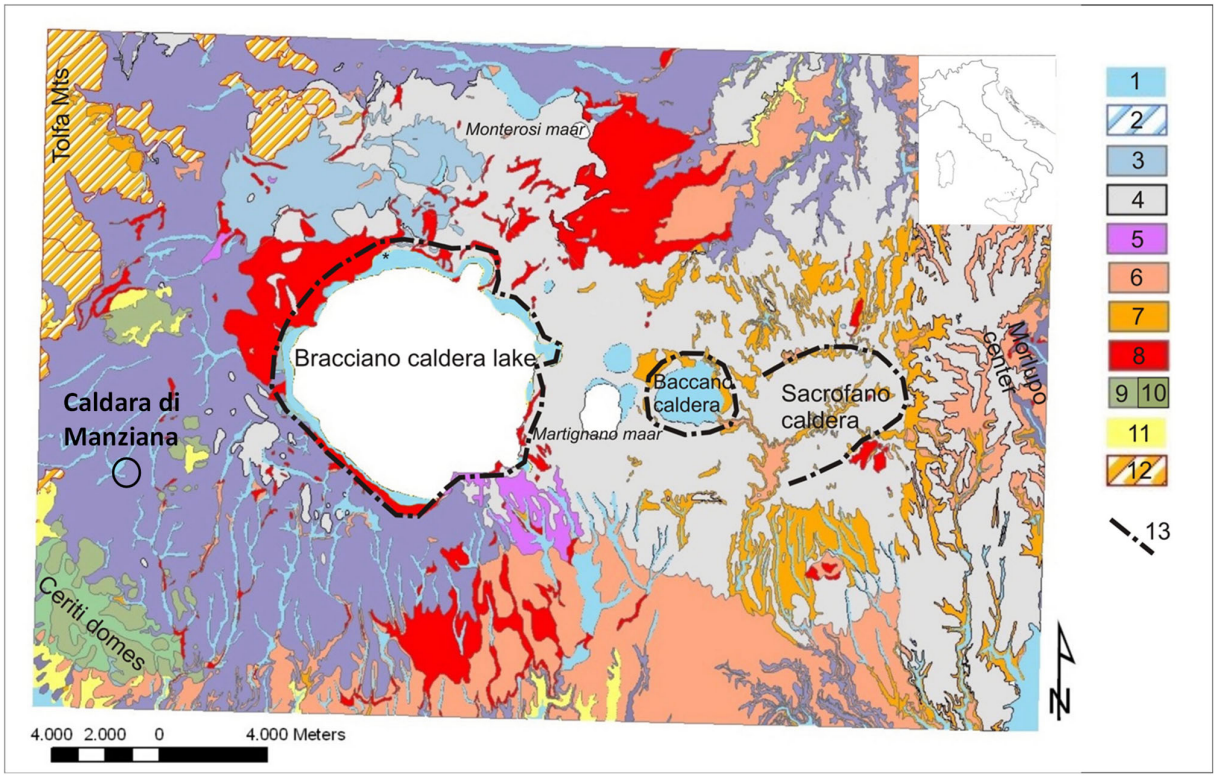

Figure S1. Location and geology of Caldara di Manziana. (a) Location of Caldara di Manziana, indicated by the red circle. The caldera can be seen as the area deprived of vegetation, due to the CO_2 emanations, in the centre of the circle (from Google Maps). (b) Geological sketch map of the Sabatini district, that shows the global geological context of Caldara di Manziana, indicated with a circle at the center, left of the map. At the top, right of the map, location of the area within Italy. Legend: 1) Holocene alluvial and lacustrine

deposits; 2) travertine; 3) scoria cones; 4) phreatomagmatic deposits from the final Sacrofano caldera phase and the recent maars; 5) pozolanaceous ignimbrites; 6) fall deposits; 7) lithoidal ignimbrites; 8) undersaturated lavas; 9-10) Manziana-Ceriti rhyodacitic domes, lavas and ignimbrites; 11) Messinian-Pliocene post-orogenic marine deposits; 12) Allochtonous Flysch. Modified from Fig. 19 in The Quaternary Magmatic events: Roman and Lucanian Magmatic provinces. Journal of the Virtual Explorer. https://virtualexplorer.com.au/article/2010/251/ultrapotassic-and-related-volcanic-rocks-in-italy/quaternary.html. (Accessed 13 May 2021).