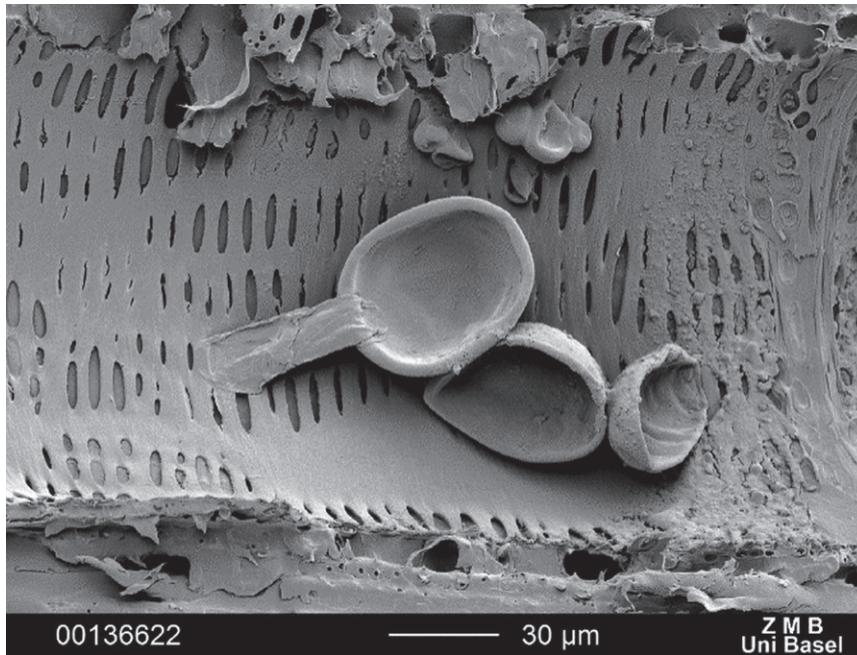
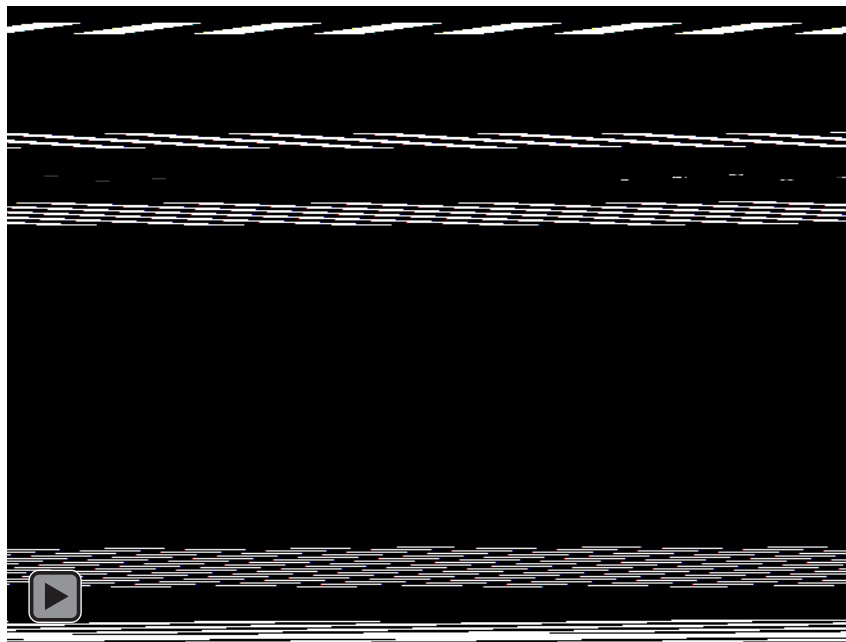


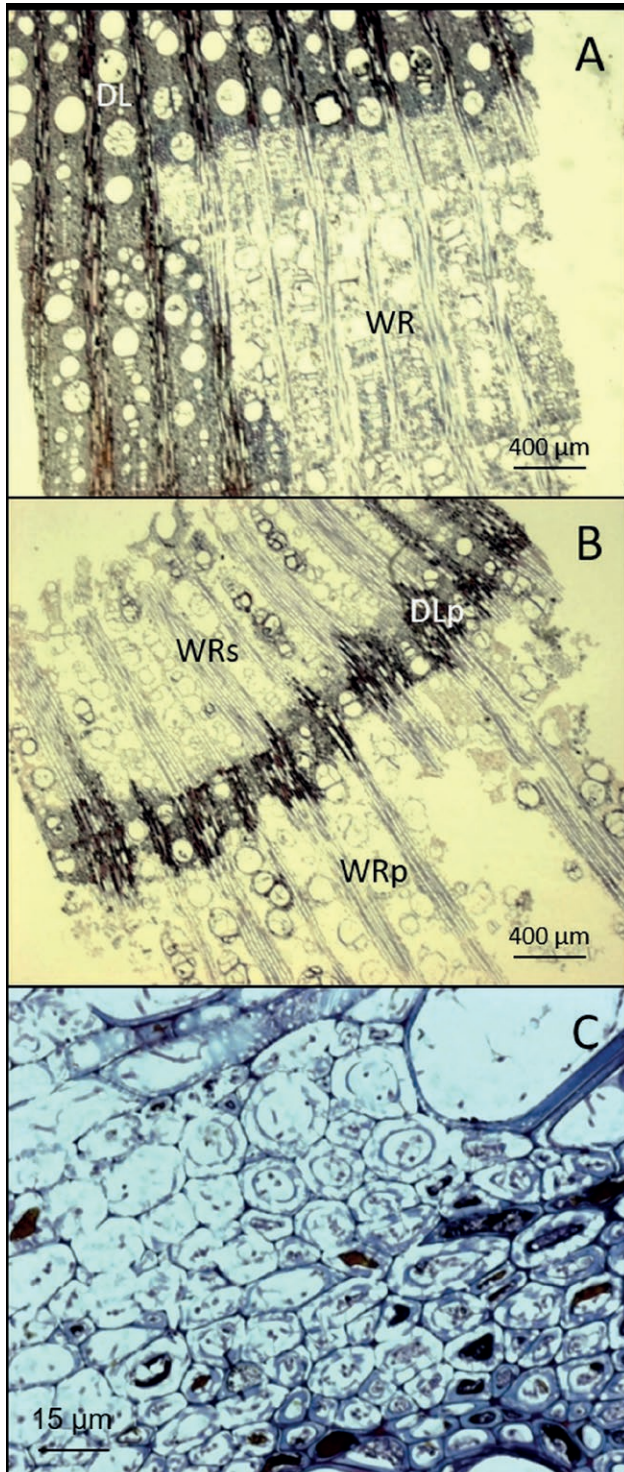
H.-H. Kassemeyer, F. Kluge, E. Bieler, M. Ulrich, J. Grüner, S. Fink, M. Dürrenberger, R. Fuchs (2022). Trunk anatomy of asymptomatic and symptomatic grapevines provides insights into degradation patterns of wood tissues caused by Esca-associated pathogens. *Phytopathologia Mediterranea* 61(3): 1451-471. doi: 10.36253/phyto-13154



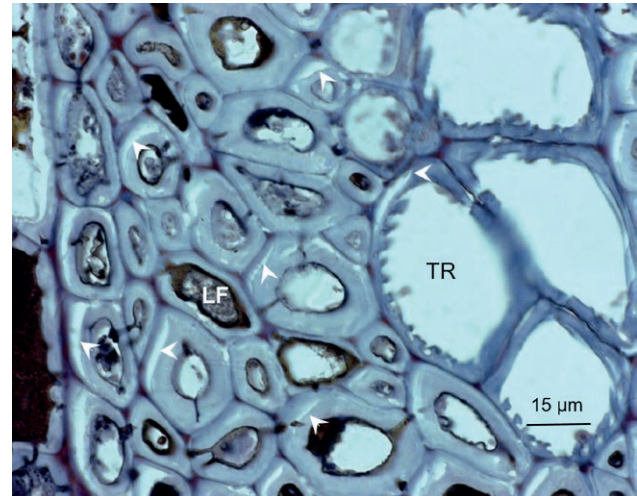
**Figure 1.** Cryo SEM image of a scalariform grapevine vessel with tylosis, from the transition between demarcation line and white rot. Tyloses invade the the vessel lumina from the neighboring VACs (not visible) via the bordered pits. 400× magnification.



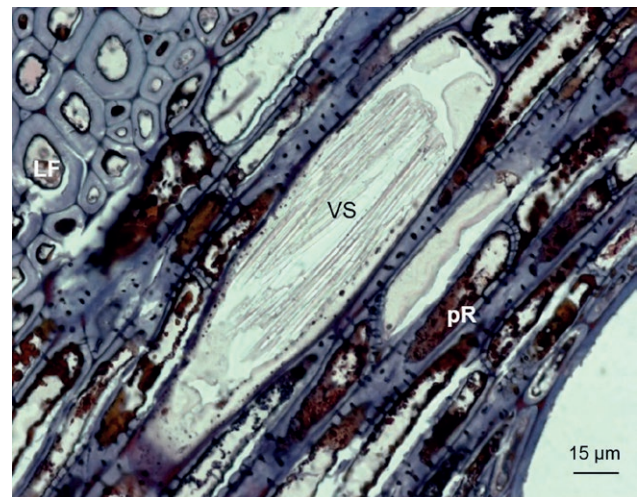
**Figure 2.** Video. Degradation pattern caused by *Fomitiporia mediterranea* in the cell walls of libriform grapevine fibres. When focusing at different planes of focus, the helical orientation of caverns in the cell walls become visible in cross-section. Bright field, Video Modus, , 63× magnification.



**Figure 3.** Grapevine wood cores artificially inoculated with *Fomitiporia mediterranea*. (A) advanced white rot (WR) and demarcation line (DL). (B) the initial stage of white rot (primary white rot - WRp) has passed the first demarcation line (primary demarcation line - DLp), and progressed more widely (secondary white rot - WRs). (C) Decomposition of the S2 cell wall layer occurred 4 months after inoculation. Bright field 63× magnification.



**Figure 4.** Tangential and cross sections of grapevine wood cores artificially inoculated with *Phaeomoniella chlamydosora* Pch, falciform caverns appeared in the S2 layer near the middle lamella, resembling those in samples from the field (arrowheads), LF libriform fibers, TR tracheids. Bright field 63×.



**Figure 5.** Grapevine wood cores artificially inoculated with *Phaeomoniella chlamydosora* containing dark deposits filled the libriform fibres and parenchyma cells, and tylosis-clogged vessels, as in the naturally infected specimens. LF = libriform fibres, VS = vessels, pR = primary wood ray. Bright field 63× magnification.