

Supplemental Material

Low-temperature investigation of residual water bound in free-living Antarctic *Prasiola crispa*

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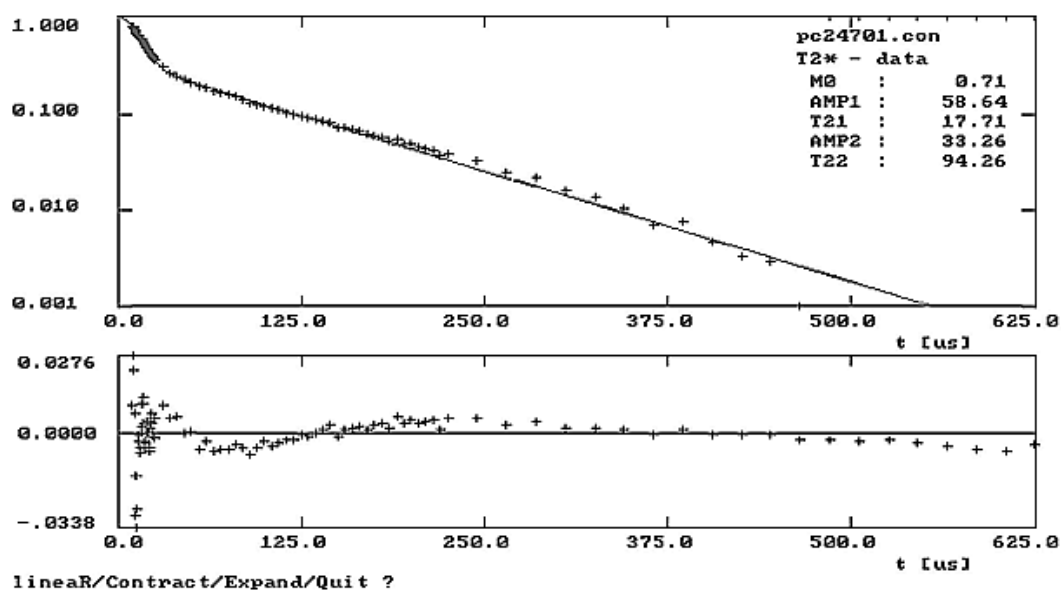


Fig. S1. a. Proton free induction decay recorded for *Prasiola crisper* thalli at 30 MHz, with the pulse length $\pi/2=1.5\mu\text{s}$. The relative mass increase was $\Delta m/m_0 = 0.078$ for $t=24.7^\circ\text{C}$. **b.** The residual function calculated as the difference between the fitted and recorded values of the FID signal, which for any recorded point does not exceed 3.4%. $AMP1 = S$; $AMP2 = L$; $T_{21} = T_{2S}^*$; $T_{22} = T_{2L}^*$.

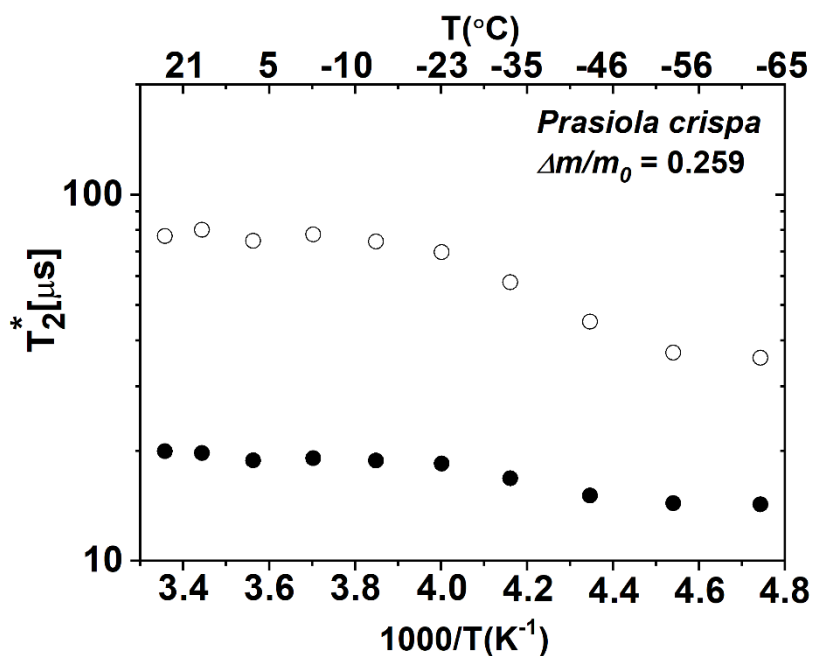


Fig.S2. ^1H -NMR FID decay times taken as a function of temperature for *Prasiola crisper* thallus hydrated to $\Delta m/m_0 = 0.259$. Solid Gaussian component (S) = closed circles, bound water fraction (L) = open squares.

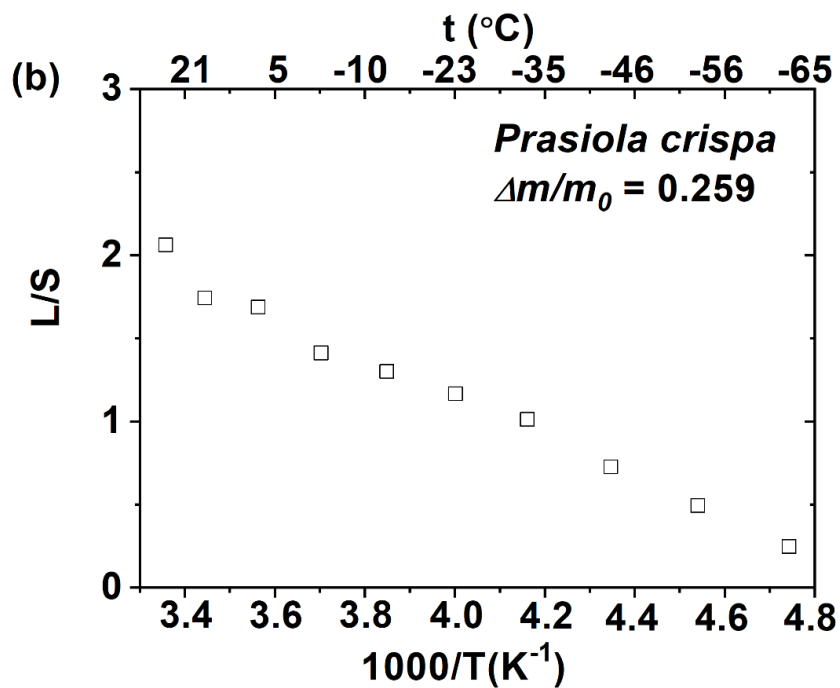


Fig. S3. Temperature dependence of the total liquid signal amplitude L/S (open triangles) expressed in units of solid, registered for *Prasiola crispa* thallus hydrated to $\Delta m/m_0 = 0.259$.

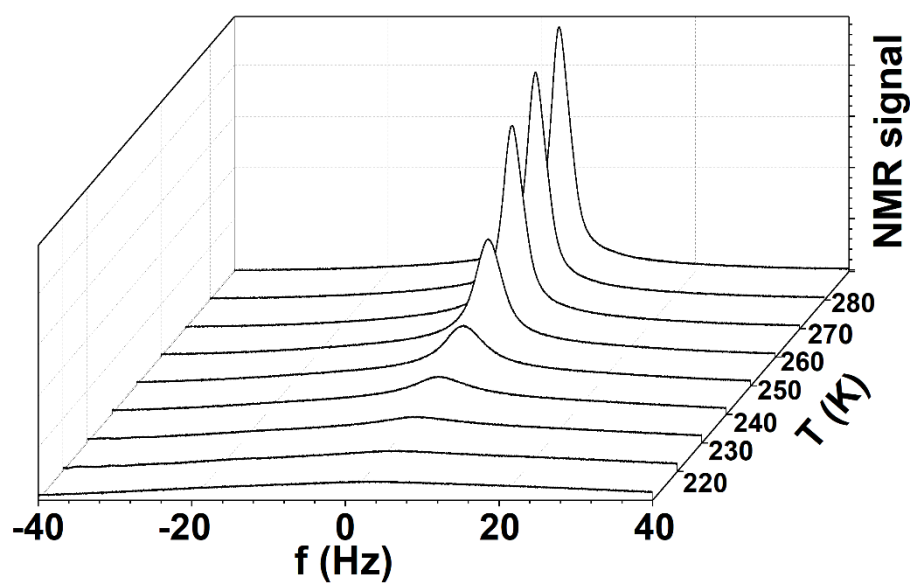


Fig.S4. Stacked plots of the 1H -NMR spectra measured as a function of temperature for *Prasiola crispa* thallus hydrated to $\Delta m/m_0 = 0.311$.

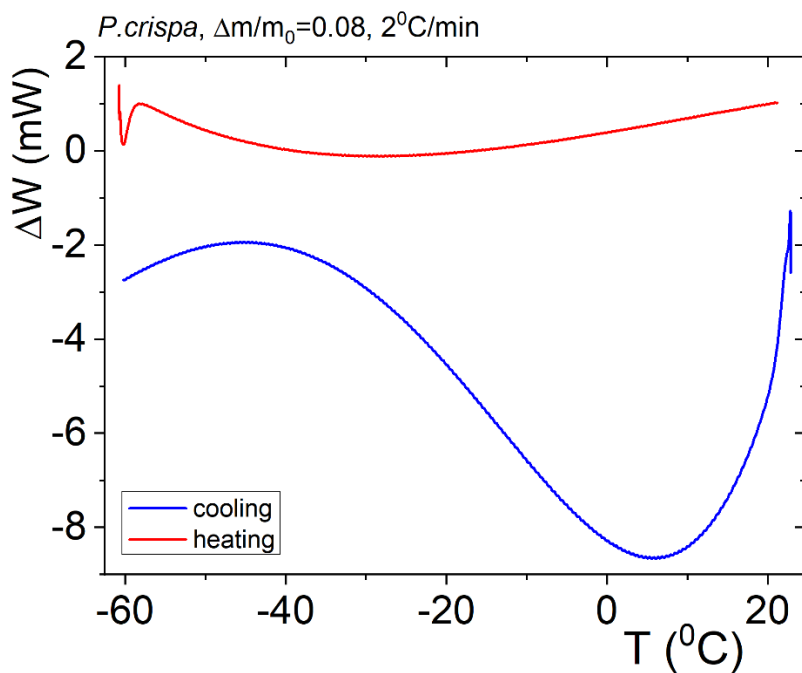


Fig.S5. DSC heating/cooling thermogram for *Prasiola crispera* thallus hydrated to $\Delta m/m_0 = 0.08$.

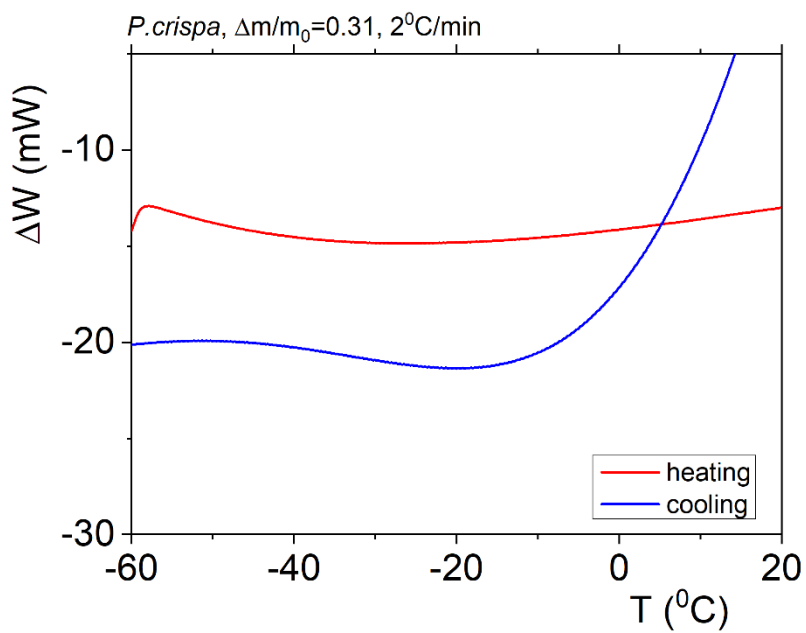


Fig.S6. DSC heating/cooling thermogram for *Prasiola crispera* thallus hydrated to $\Delta m/m_0 = 0.31$.

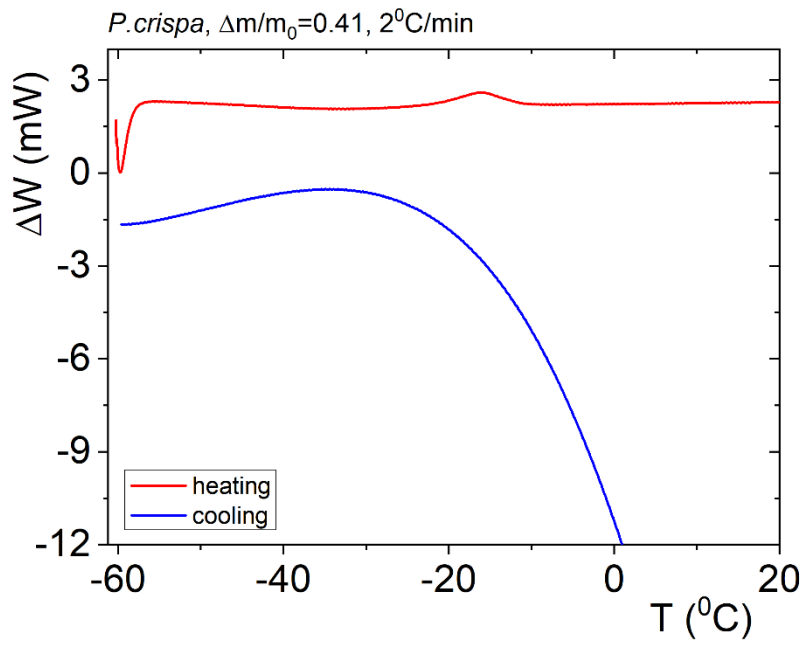


Fig.S7. DSC heating/cooling thermogram for *Prasiola crispera* thallus hydrated to $\Delta m/m_0 = 0.41$.

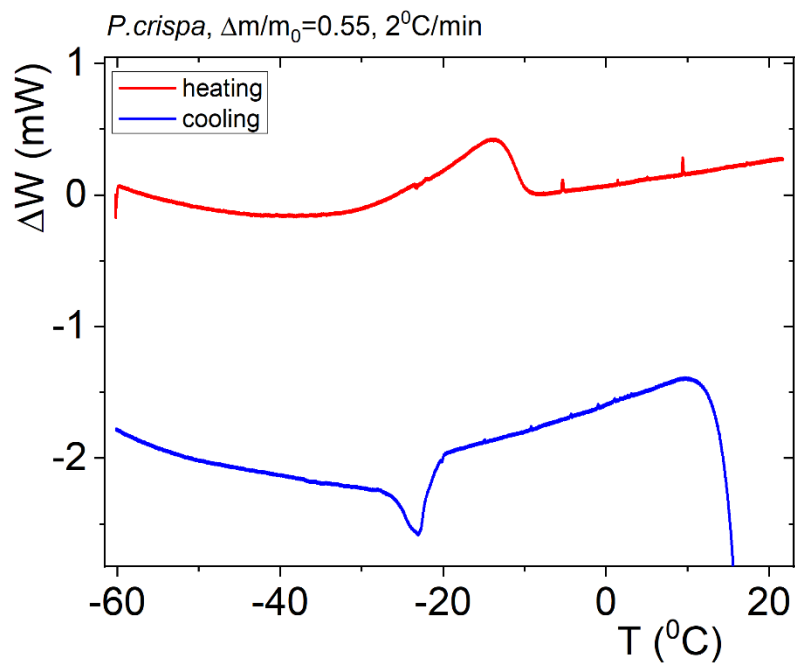


Fig.S8. DSC heating/cooling thermogram for *Prasiola crispera* thallus hydrated to $\Delta m/m_0 = 0.55$.