SUPPLEMENTARY MATERIAL FOR

The cracking of Scots pine (Pinus sylvestris) cones

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**Supplementary material descriptions**

**S-Figure 1: Rheometric analysis.** Graph showing shear rate-independent viscosity of resin from *P. sylvestris* at different temperatures.

**S-Video 1-7: Rapid scale movement.** Rapid initial cone opening with 1-7 scales involved simultaneously.

**S-Video 8: Rapid cone opening.** In the highspeed video footage the rapid scale movements during the first cone opening can be observed, including a free-swinging movement.

**S-Video 9: Comparison of initial and secondary opening.** This compilation of a first and secondary opening shows the random and abrupt movements of scales during the initial cone opening. In the second part of the video, the secondary opening of the same cone is visible, which starts synchronized in the basal part of the cone and continues to the tip of the cone.