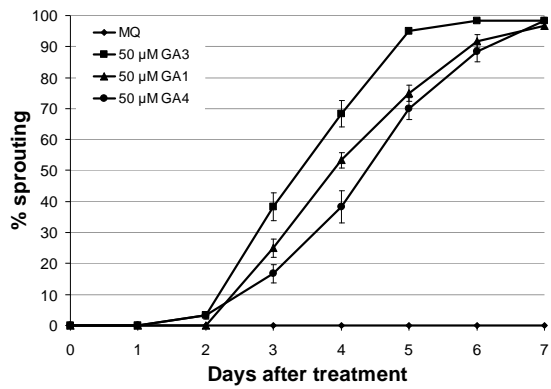


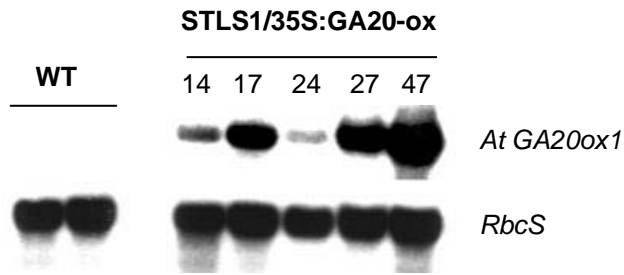
Supplemental Figure 1: In vitro sprouting assay with tuber discs excised at different time points after harvest.

Wild-type tuber discs were excised at harvest, after three or six weeks of storage and were treated with 50 μM GA₃ (A), 50 μM BAP (B) or water (MQ) as a control. Sprouting behavior of tubers discs was monitored for up to eight days. Graphs show the mean ± SE of five independent experiments (n = 20-30).



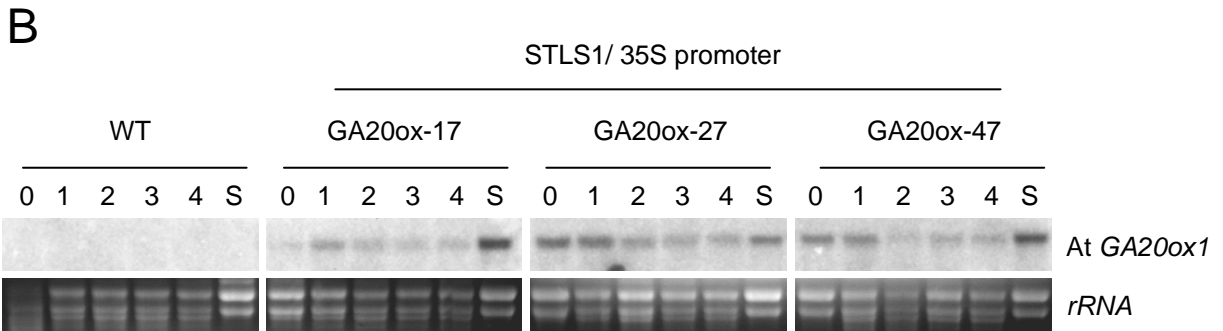
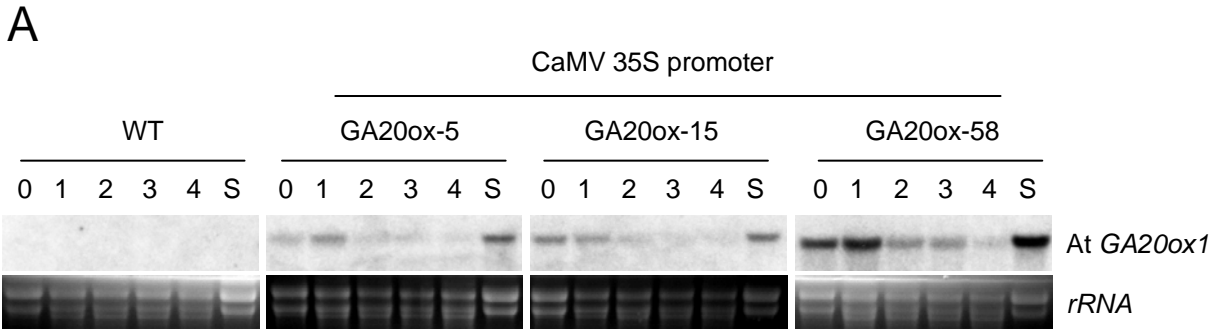
Supplemental Figure 2: In vitro tuber sprouting of wild-type tubers using different gibberellin species.

Wild type tuber discs were treated with 50 μM GA₁, GA₃, GA₄ and water (MQ), respectively. Tuber discs were excised two weeks after storage. Standard deviations represent three independent experiments (n = 20).



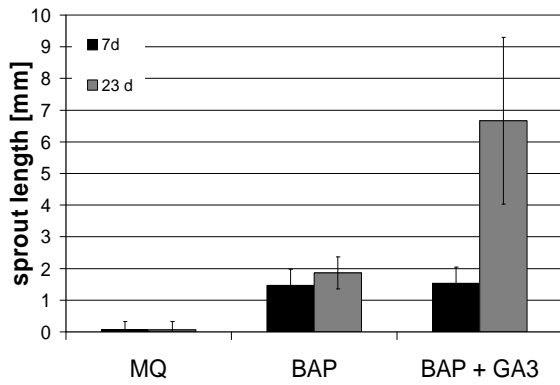
Supplemental Figure 3: Expression of Arabidopsis GA20ox in transgenic potato plants under control of the chimeric STSL1/CaMV 35S promoter

Northern blot analysis of selected *GA20ox*-expressing lines (14, 17, 24, 27, 47). Twenty micrograms of total RNA isolated from leaves were loaded per lane and probed with *At GA20ox1*. Hybridization with the small subunit of *Rubisco* (*RbcS*) was used as loading control.



Supplemental Figure 4: Expression level of *GA20ox* caused by different plant promoters during tuber storage.

Northern blot analysis of transgenic potato tubers during storage which express the Arabidopsis *GA20ox1* gene under control of the CaMV 35S promoter (A) or of the chimeric STLS1/CaMV 35S promoter (B). Twenty micrograms of total RNA isolated from either tuber parenchyma or tuber sprouts (S) were loaded per lane and probed with At*GA20ox1*. Samples were taken from growing tubers (0) and from tubers after 1, 2, 3 and 4 months of storage at room temperature and darkness. In addition, sprouts (S) of tubers after 4 months storage were sampled. Ethidium-Bromide staining of rRNA was used as loading control.

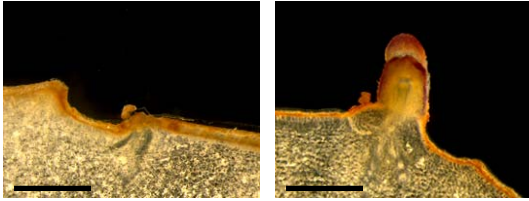


Supplemental Figure 5. Induction of growth in BAP-treated tuber discs by application of GA₃

In a sprout release assay, wild-type tuber discs were treated with 50µM BAP or water as a control. When BAP-induced sprouting had reached 100% after seven days, sprout length was measured before half of the BAP-treated tuber discs were additionally treated with 50µM GA₃ by applying one drop of the solution on the tip of each sprout. The GA₃-treatment was repeated after two days - day 9 after BAP treatment - and sprout length was measured 14 days after the second GA₃-treatment (23 days after BAP treatment). Data presented are mean values of 30 replicates ± SD.

H₂O

50 μ M BAP



Supplemental Figure 6: In vitro tuber sprouting assay of CKX-4 tuber buds treated with BAP

Cross sections of tuber discs from CKX-expressing line 4 treated with water and 50 μ M BAP. Pictures were taken five days after treatment. The black bars represent 1 mm.