

SUPPLEMENTAL INFORMATION

Figure S1. DNA ploidy level distribution upon infection of *dell-1* (A), *E2Fe/DEL1^{OE}* (B), *ccs52a2* (C), *SIM^{OE}* (D), and wild-type Col-0 plants (E) at 24 dpi.

A, *dell-1* knockout plants displayed normal symptomatology, but the amount of cells with a 2C content was 8% lower than that of wild-type controls. B, Plants overexpressing *E2Fe/DEL1* on the other hand developed the regular symptoms, but here the number of cells with a 2C content was 2.5% higher than that of wild-type controls. C, The *ccs52a2* knockout mutant developed wild-type symptoms and symptomatic leaf cells exhibited the typical ploidy level distribution. Nevertheless, compared with infected wild types, the number of cells with a 2C content was 7% higher. *SIM*-overexpressing plants had lower CDKA activity and enhanced endoreduplication but also developed symptoms similar to those of wild-type plants. The 2C level in the symptomatic leaves was 10% lower than that of the wild type and no cells with a 64C content were counted upon infection. These data indicate that the *E2Fe/DEL1/CCS52A2* and the *SIM* pathways are not significantly involved in controlling CDK activity in symptomatic leaves. However, the modest alterations that are measured in the mutants might indicate that in a wild-type background these regulators play a role as a negative feedback system in an attempt to counter the *R. fascians* effect.

Supplemental Table SI. Primers used in qRT-PCR amplification

Gene	Forward primer(5'-3')	Reverse primer(5'-3')	Reference
<i>ACT2</i>	GGCTCCTCTTAACCCAAAGGC	CACACCATCACCAGAATCCAGC	Depuydt et al. (2008)
<i>CYCD3;1</i>	CGTTCGTAGACCACATTATCAGGAG	CGGAGATTACAGAGAGGAGGAGAC	E. Russinova (unpublished)
<i>CYCD3;2</i>	CGTTCGTAGACCACATTATCAGGAG	AAGTACCTCATAAACCTCGTATCAG	E. Russinova (unpublished)
<i>CYCD3;3</i>	TTAGCCACTGCAATAATGGTCTCTG	CTGAATGACGCATCAAACACACC	E. Russinova (unpublished)
<i>CDKB1;1</i>	GGTGGTGACATGTGGTCTGTTGG	CGCAGTGTGAAACACCCGG	Boudolf et al. (2004a)
<i>CDKA</i>	CCTAGGATCTCATCATTACTCTACACC	CCATGTATCCTCGTACGGAGTTCC	This work
<i>CYCA2;3</i>	AGGCACAGATAACACAGCTG	TGAGGTAGAGAGTGTGTCAGATGC	Imai et al. (2006)
<i>E2Fe/DEL1</i>	GGTTAGGGTACAATGGTGAGCC	CTCTGTAGCGTTTTCTTGGGACG	Lammens et al. (2008)

Boudolf V, Vlieghe K, Beemster GTS, Magyar Z, Torres Acosta JA, Maes S, Van Der Schueren E, Inzé D, De Veylder L (2004) The plant-specific cyclin-dependent kinase *CDKB1;1* and transcription factor *E2Fa-DPa* control the balance of mitotically dividing and endoreduplicating cells in *Arabidopsis*. *Plant Cell* **16**: 2683-2692

Depuydt S, Doležal K, Van Lijsebettens M, Moritz T, Holsters M, Vereecke D (2008) Modulation of the hormone setting by *Rhodococcus fascians* results in ectopic *KNOX* activation in *Arabidopsis*. *Plant Physiol* **146**: 1267-1281

Imai KK, Ohashi Y, Tsuge T, Yoshizumi T, Matsui M, Oka A, Aoyama T (2006) The A-type cyclin *CYCA2;3* is a key regulator of ploidy levels in *Arabidopsis* endoreduplication. *Plant Cell* **18**: 382-396

Lammens T, Boudolf V, Kheibarshekan L, Zalmas LP, Gaamouche T, Maes S, Vanstraelen M, Kondorosi E, La Thangue NB, Govaerts W, Inzé D, De Veylder L (2008) Atypical E2F activity restrains APC/CCCS52A2 function obligatory for endocycle onset. *Proc Natl Acad Sci USA* **105**: 14721-14726