

T H E
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ON THE COVER



Exogenous cytokinin is critical for *in vitro* shoot regeneration. Liu et al. show that ARR12 is a central enhancer of callus formation and shoot regeneration, whereas ARR1 is a strong inhibitor of this process that counteracts the positive effect of ARR12. ARR1 competes with ARR12 for binding to the *CLV3*, *WUS* and *IAA17* promoter, which contributes to its ARR12-dependent inhibitory effect on callus formation and shoot regeneration. So we now know that type-B ARR1s have diverse effects on callus formation and shoot regeneration. The image shows the abundant regenerated shoots along the *arr1* root explant in Arabidopsis.

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