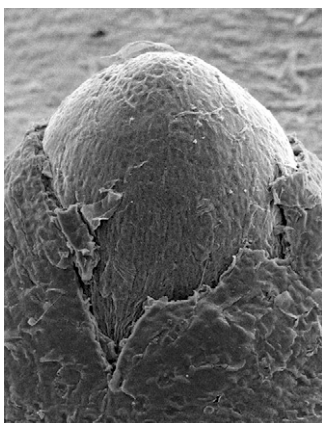


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ON THE COVER



In rice (*Oryza sativa*), the emergence of adventitious roots in response to submergence is preceded by localized death of epidermal cells. Steffens et al. (pages 3296–3306) show that the crucial decision of rice root epidermal cells to abandon their protective function and enter a cell death program depends on two signals: a mechanical signal from the root to overlying epidermal cells, which provides spatial resolution, and ethylene signaling, mediated by reactive oxygen species, which promotes cell death in mechano-stimulated cells. The cover shows an SEM image of an emerging adventitious root.

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
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

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
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
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
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
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