

T H E  
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**ON THE COVER**



Pear is a self-incompatible fruit tree, and cultivated pears require pollination by insects or manually by humans in production. S-RNase is the pistil self-incompatibility determinant that degrades pollen RNA during the self-incompatibility response in pear. Besides degrading RNA, are there other targets for S-RNase in the pollen tube? How does the pollen tube protect against the cytotoxicity of S-RNase? Chen et al. (pages 1023–1039) report that the actin cytoskeleton is a target of S-RNase in pear and uncover a mechanism that protects the pollen tube from S-RNase cytotoxicity involving phosphatidic acid, until sustained S-RNase activity reaches the point of no return, resulting in pollen tube death. The cover image shows that the pear flowers are being pollinated by a bee.

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