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On the Cover: Fruit ripening and senescence involve hydrolysis and softening of tissues and a dramatic loss of chlorophyll. Various cellulases and proteases participate in the process. The most abundant Cys protease in green and ripe pineapple (*Ananas comosus*) fruit is bromelain, which accumulates without an inhibitory propeptide. How is bromelain temporally regulated to avoid cellular damage until the stage of development when it is needed? Cystatins are potent inhibitors of Cys proteases; however, the bromelains are enigmatically recalcitrant to inhibition by plant and animal cystatins. In this issue, Neuteboom et al. (pp. 515–527) examined a novel secreted pineapple cystatin (AcCYS1), which has a unique Ala-Glu-rich N-terminal trunk (NTT) absent in other cystatins. They show the NTT is required for complete inhibition of stem and fruit bromelain. Posttranslational cleavage of the NTT specific to ripening fruit renders the AcCYS1 inactive against fruit bromelain but not stem bromelain, thereby significantly enhancing bromelain activity in ripe fruit. Three fruit (unripe, medium ripe, and fully ripe) are shown. Removal of the NTT (brown region) of AcCYS1 and release of active bromelain (pie-shaped circle) are represented above the fruit. Cover design by David Christopher. Photography by Eun Ju Cho with assistance from Kristie Matsumoto.

ON THE INSIDE

GENOME ANALYSIS

BREAKTHROUGH TECHNOLOGIES

RESEARCH ARTICLES

BIOCHEMICAL PROCESSES AND MACROMOLECULAR STRUCTURES

Continued on next page

Continued from preceding page

BIOENERGETICS AND PHOTOSYNTHESIS

DEVELOPMENT AND HORMONE ACTION

ENVIRONMENTAL STRESS AND ADAPTATION TO STRESS

Continued on next page

Continued from preceding page

GENETICS, GENOMICS, AND MOLECULAR EVOLUTION

PLANTS INTERACTING WITH OTHER ORGANISMS

WHOLE PLANT AND ECOPHYSIOLOGY

SYSTEMS BIOLOGY, MOLECULAR BIOLOGY, AND GENE REGULATION

Continued on next page

Continued from preceding page

CORRECTIONS

RETRACTION

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