Wet bark of a Pacific yew tree (*Taxus brevifolia*) in Union, Washington, USA (vertical dimension ~15 centimeters). Wild Pacific yew thrives in the damp coastal forests of northwestern North America, with thin bark ranging in color from rose to auburn. The anticancer agent paclitaxel was originally derived from yew trees. Such complex and useful compounds are just one of the many outputs from plant metabolic networks, as analyzed in the special issue beginning on page 1657.

Photo: Don Paulson, www.donpaulson.com
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1654 Engaging Students in Earthquakes via Real-Time Data and Decisions
A. E. Egger

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Counts of impact craters provide age for a region on Mars close to the landing site of rover Curiosity.

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1684 Synthesis of Self-Pillared Zeolite Nanosheets by Repetitive Branching
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Single-step synthesis of pillared zeolite nanosheets is achieved with a common structure-directing agent.

1687 Seemingly Anomalous Angular Distributions in H + D₂ Reactive Scattering
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An elementary chemical reaction manifests unexpectedly complex rotational dynamics.

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Evidence of past earthquakes from sediments along New Zealand’s Alpine Fault improves seismic hazard estimates.

1693 Bilaterian Burrows and Grazing Behavior at >585 Million Years Ago
E. Pecoits et al.
Neoproterozoic trace fossils from Uruguay indicate that early animals appeared at a time between global glaciations.

1696 Early Pottery at 20,000 Years Ago in Xianrendong Cave, China
X. Wu et al.
Shards from a cave in China imply that humans had invented pottery and used it for cooking by about 20,000 years ago.

1700 Photonic Crystal Light Collectors in Fish Retina Improve Vision in Turbid Water
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Layering cones on top of rods allows the elephantnose fish to see low-contrast objects in a murky environment.

1704 A *Papaver somniferum* 10-Gene Cluster for Synthesis of the Anticancer Alkaloid Noscapine
T. Winzer et al.
A biosynthetic pathway inherited as a gene cluster generates a pharmaceutically useful alkaloid in poppies.

1708 Structural Basis for Prereceptor Modulation of Plant Hormones by GH3 Proteins
C. S. Westfall et al.
Crystal structures of plant GH3 proteins reveal how these enzymes accommodate jasmonates, auxins, and benzoates.

1711 *Uniform ripening Encodes a Golden 2-like Transcription Factor Regulating Tomato Fruit Chloroplast Development*
A. L. T. Powell et al.
Controlling when tomatoes turn from green to red requires knocking out the gene that adds flavor.

1715 The Paleozoic Origin of Enzymatic Lignin Decomposition Reconstructed from 31 Fungal Genomes
D. Floudas et al.
The enzyme family that enables fungi to digest lignin expanded around the end of the coal-forming Carboniferous period.

1719 Leucine-tRNA Initiates at CUG Start Codons for Protein Synthesis and Presentation by MHC Class
S. R. Starck et al.
T cells can use leucyl–transfer RNA (tRNA), instead of methionyl-tRNA, to initiate translation.

1723 CTD Tyrosine Phosphorylation Impairs Termination Factor Recruitment to RNA Polymerase II
A. Mayer et al.
Phosphorylation of a tyrosine inhibits the binding of termination factors and promotes the binding of elongation factors.

1726 Elastic Coupling Between RNA Degradation and Unwinding by an Exoribonuclease
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