



Fascination of
Plants Day
May 2015

K-12 Schools
USA RESOURCE GUIDE

Goal

Cultivate a fascination for how plants sustain the environment and provide essential food, medicine, fuels, and fibers for daily life.

Focus

Inspire students to develop interest in the importance of plants through fun activities, critical thinking and inquiry-based explorations.

May 18th is Fascination of Plants Day!

Use this resource kit to figure out how YOU can celebrate. Report plans now and successes later to Katie@aspb.org.
[Pssst...it's okay if your event isn't on May 18. A close date is just fine.]

Online Resources

- US-based [FoPD Events & Activities](#) – get inspired; put YOUR activity on the [interactive US map](#)
- The [international FoPD site](#) – more inspiration; [26+ countries participating](#)
- [FoPD-US Messaging](#) for taglines, social media options, key terms, heftier talking points, and notable quotes about plants and plant science.

Overview Materials

[The 12 Principles of Plant Biology](#) are foundational concepts of plant science (they [align with NGSS](#)).

- [12 Inquiry-based Activities for the 12 Principles of Plant Biology](#) (~4-9)
- [Bookmarks available for each Principle](#) (K to 99)
- [10 Classroom Activities for the Principles of Plant Biology Bookmarks](#) (K-12)

[My Life As A Plant - Coloring & Activity Book](#): Sally Sunflower and pals inspire kids to explore the world of plants and plant biology. [Download](#) free or order from [Amazon](#). K-3+

[Why Study Plants?](#) (PPT) reviews critical roles plants play in daily life and to sustain life on earth. Grade 4 & up.

[Career Day Power Point](#) (PPT) shows what it means to work as a plant biologist. Grade 6 & up

[Using Biotechnology for Sustainability](#) (PPT) shows how today's agricultural needs can be met while minimizing negative impacts in the future. Grade 6 & up

Classroom-Ready Teaching Hand-Outs that Inspire Hands-On Learning

[Plants in Your House](#): Use this form to take a plant treasure hunt around your house. PreK-4

[Hamburger](#): Find out just how many plants you eat with your hamburger. PreK-4

Plant Fashion: [Plants in Your Pants](#) (cotton), [Plants in Your Pants - Indigo](#), and [Genes in Your Jeans](#). Grade 5 & up.

[Grow a Chewy-Ooey-Gooey-Chocolatey-Nutty Candy Bar](#): Nibble on sweet plant facts. Grade 4-7

[Phyllotaxis & Fibonacci](#): Math, biology, and the creation of seed, leaf, and petal spiral patterns. Grade 6-AP

[How to Read a Scientific Paper](#) unpacks the process of peer review, the anatomy of a scientific paper, ethics in research, understanding numerical data, and much more. A plant science [case study](#) is included. Grade 9-16

Games, Video, Podcasts & More

[Plants Are Cool, Too](#): Fascinating short videos (~7-15 min) of one plant scientist's world-wide explorations of plants (also on [YouTube](#)).

[Plant Science Radio w/ Activities for Fun & Learning](#): Enjoy 3 radio shows/podcasts: *Plant Detective --Flora Delaterre*; *MicrobeWorld*; and *A Moment of Science*. Plus 10 activities to try after the episodes. K-12

[How to Host a Plant Biology Film Fest](#): Enjoy plant-centric plot twists and biological themes. K to 99

Biotech Games to help make connections between seeds, plants and foods. Including ["Who's In Your Family"](#), ["Dirt to Dinner"](#) and ["Who's the Culprit"](#). K-12

[ChloroFilms](#) offers short plant science videos via YouTube; some silly, others serious. K-99

[sLowlife](#) accelerates the time-scale of plants into our own frame of reference, speeding up their everyday lives to a pace that resonates with our own. Grade 5 & up

[Secrets of Plant Genomes Revealed](#) melds scientist's input with hip videos to explore questions like *What causes crazy corn mutations?*; *Is GM food safe?*; and *Do genomes come in more than one size?* Grade 7 & up

[Virtual Plant Biotechnology and Genomics 2.0](#) (VPBG2.0) Five modern biology/fantasy learning games to isolate a gene of interest, transform a virtual plant, and explore the issues surrounding transgenic crops. Grade 7 & up

Digging Deeper (extended explorations)

[Agronomy K-12](#): Free, interactive resources for ~PreK-3. Plus, a field trip model for bringing youngsters to campus to explore plants, soil science and agriculture.

[Bottle Biology](#): Use soda bottles and other recyclable materials to create Decomposition Columns, Bottle Gardens, and more to explore science and the environment. K-12

[DNA for Dinner](#) and [Backyard Mystery](#) are part of an [afterschool program used by 4-H](#). Grade 5-8

[Fast Plants-self compatible](#) (FPsc) inquiry-based lab exercises are for teaching Mendelian and molecular genetics and evolutionary principles. Students can conduct an artificial selection experiment. Grade 9 & up

[Gene Expression and Segregation Analysis](#) (GESA) lab activities using Oregon Wolfe doubled haploid barley to explore an organism's genes and its outward appearance. Contact Roger Wise rpwise@iastate.edu. K-12

[Lilliputian Garden Cups](#): These cup necklaces germinate fertile discussions about plant care. PreK & up

[Partnership for Research and Education in Plants](#) (PREP) invites students to experiment on mutant lines of Arabidopsis under varied stress conditions and then analyze the phenotypes. Grade 9 & up

[Picture Books for Plant Biology](#): These select titles help youngsters cultivate both reading skills and plant science appreciation. PreK to 99

[PlantingScience](#) (PS) connects mentors (usually faculty or industry scientists) to classrooms through a *virtual* collaboration using the free, peer-reviewed plant science learning modules. Grade 5 & up

[The Great Lakes Bioenergy Research Center](#) (GLBRC) shares learning resources on bioenergy research, energy concerns, and sustainability issues affecting our planet. GLBRC [consultants](#) facilitate use of their resources. K-12