

## Horticultural News and Research Important to American Gardeners



'Blueberry Sundae's' profusion of blooms and compact nature made it the best blue-flowering *Baptisia* cultivar in Mt. Cuba Center's trial.

### BAPTISIA HIGHLIGHTED AS OUTSTANDING NATIVE PLANT FOR GARDENS

The Mt. Cuba Center, a 150-acre garden near Wilmington, Delaware, dedicated to native plants and ecosystems, recently completed a four-year *Baptisia* trial. Native to regions east of the Rocky Mountains, these members of the legume family (Fabaceae) are "super easy to grow, deer-resistant, incredibly low-maintenance, and long-lived," says Mt. Cuba's Research Horticulturist George Coombs. He rated the flower quality and plant habit of 46 species and cultivars during the evaluation.

According to Coombs, the quality that clearly set the cultivars apart was floppiness—some plants' long stems were easily toppled by wind or rain. Others grew too large for the average home garden, or had foliage that obscured the

flowering stalks. Among Coombs' top choices were 'Blueberry Sundae,' a cultivar that's "the perfect size, and a nice blue color;" and 'Lemon Meringue,' a cultivar with distinctive gray stems and yellow flowers. To access the full report, visit [www.mtcubacenter.org](http://www.mtcubacenter.org).

### PLANTS DISPLAY RISKY BEHAVIOR

Animals may not be the only living things that take risks for a chance at greater gain. In a study published in the July 2016 issue of the journal *Current Biology*, researchers found that pea plants take gambles when it comes to root growth. A team of scientists from Tel-Hai College in Israel and Oxford University in England demonstrated this in an experiment where pea seedlings were grown with their roots divided between two pots that contained differing levels of nutrients.

As might be expected, pea seedlings with their roots divided between a pot with adequate levels of nutrients and one with variable levels—sometimes high and sometimes low—grew more roots in the stable pot.



Scientists analyzed pea plants' roots, divided between two pots, to determine how they responded to the amount and variance of available nutrients.

However, when a seedling's roots were divided between a pot with insufficient nutrients for survival and one with variable levels of nutrients, more roots grew in the varying pot. In the second scenario, where the plant would almost certainly die in the pot with consistent but low levels of nutrients, greater root growth in the pot that had a chance of providing enough nutrients indicates that plants have a mechanism to respond to risk, similar to animals.

According to the study's co-author Alex Kacelnik of Oxford University, "This is the first demonstration of an adaptive response to risk in an organism without a nervous system." He adds that this research shows that "interesting behaviors can theoretically be predicted as biological adaptations" that help the organism take advantage of natural opportunities. For more information, visit [www.cell.com/current-biology/home](http://www.cell.com/current-biology/home).

### TAPPING TECHNOLOGY TO TRACK BUGS

What's bugging you in your garden? A new citizen-science project called the Big Bug Hunt wants to know. Through its website, it collects reports from gardeners around the world about the insect and other invertebrate sightings in their area. Its immediate aim is to develop a



An early warning about potential pests could give gardeners such as Dan Dore a head start on taking preventive measures in his edible front garden, pictured left.

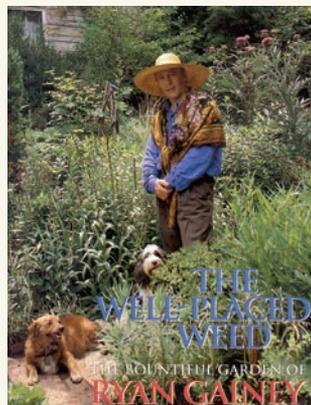
prediction system to let gardeners know when pests are approaching.

"Every gardener has experienced the disappointment of losing crops or plants to a sudden invasion of pests," says Dan Dore, designer and internet marketing strategist for Growing Interactive, the software development company that built the website. "With most wanting to garden organically, they need a warning system to take preventive action," he adds.

## PEOPLE and PLACES in the NEWS

### IN MEMORIAM: GEORGIA LANDSCAPE DESIGNER RYAN GAINEY

Ryan Gainey, a renowned horticulturist and designer, died July 29 at the age of 72 during a fire at his second home in Lexington, Georgia. Gainey was well known in the Lexington community as well as in Decatur, Georgia, where he had his primary home.



Gainey owned his own landscape design company, Ryan Gainey & Co, and designed numerous gardens in the United States and abroad. He also created a line of terracotta pots and garden accessories, and published several books, among them *The Well Placed Weed*, in which he writes about his distinctive, exuberant gardening style and the creation of the gardens around his Decatur home. Designed as a series of picturesque rooms, they embody his philosophy that the house and garden should blend seamlessly.

The gardens, which have been a fixture on the Atlanta Botanical Garden's "Gardens for Connoisseurs" tour for more than 20 years, have been featured in numerous magazine articles and books.

Gainey was lead designer for the visitor center and gardens at South Carolina Botanical Garden at Clemson University, and he had collaborated with the Atlanta Botanical Garden, the Atlanta History Center, and the Atlanta Opera to create horticultural displays for major fundraising events. For more information, visit [www.ryangainey.com](http://www.ryangainey.com).



Since launching in June, the website has gathered more than 10,000 reports, which according to Dore, can each be made "in under 15 seconds." These data are already being used to develop prediction algorithms for common insects such as aphids, which will be made available to the public in the near future. The Big

Bug Hunt also collects data on beneficial creatures such as bees and lacewings.

Go to [www.bigbughunt.com](http://www.bigbughunt.com) for additional information and to report your own sightings.

*Written by Editorial Intern Natalie Sheffield and Associate Editor Viveka Neveln.*