



Ka Lono Pua

"The Flower News"

Vol. XV No. 1 February 2008

Oahu County

Cooperative Extension Service

Spring - Around the Corner

After so much rain, it is hard to think of the not too distant future when the days grow longer, warmer and drier. Now is the time to prepare for those great growing days of spring and summer. In our "perpetual summer" people always ask "When is the **best** time to plant or transplant?"

The answer is almost the same as you would hear in temperate zones – "In the spring". The reasons are twofold. First the temperature and days' length are not as harsh as the hot long days of summer, so the plants have an easier time establishing or adjusting to their new growing conditions.

Secondly, because the days are progressively getting warmer and longer, there will soon be more opportunity for photosynthesis. Therefore, the plants begin to grow faster and stronger. If you plant in the fall, most plants' growth rate slows under the lower light and shorter day conditions. Some plants do grow better under lower light conditions, but it is much easier and cheaper to lower light levels than raise them.

So now is the time to get planting.

In This Issue...

- ◆ Ag-Tourism Growing
- ◆ What to Do About Snails
- ◆ New CTAHR Publications.....and more

Future Happenings

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| Feb 8-11 | ANLA Management Clinic
Louisville, KY (202) 789-2900
www.managementclinic.org |
| Feb 14 | Valentine's Day |
| Feb 14 | DOGAH Meeting, 7:30 p.m.
HDOA Board Room |
| Feb 18 | President's Day Holiday |
| * Feb 22, 29 | Market Your Business Workshop |
| Feb 29
Mar 1 | Pest & Disease Management
in Ornamentals Conf., Soc. of
American Florists, Atlanta
http://www.safnow.org/ |
| Mar 2-9 | Philadelphia Flower Show, (215)
988-8800 www.theflowershow.com |
| Mar 4-6 | World Floral Expo, Miami, FL
(305) 969-3301
www.worldfloralexpo.com |
| * Mar 5 | Hawaii Agritourism Association
Meeting, 10 am – 1 pm Gilmore
Hall, UH Manoa via Polycom |
| * Mar 7, 14 | Market Your Business Workshop |
| Mar 8 | Centennial Celebration, Pearl City
Urban Garden Center, 9 am - 1 pm |
| Mar 12-16 | San Francisco Flower & Garden
Show, Cow Palace
www.gardenshow.com/sf |
| * See Newsletter for details. Con't | |

Mar 17	St. Patrick's Day
Mar 21	Good Friday (State Holiday)
Mar 23	Easter
Mar 27	Agriculture Sustainability Day at State Capitol. For more info call HI Farm Bureau at 848-2074.
Mar 29 - Apr 5	Spring Pack Trials. Various locations in California, www.ngb.org/pack_trials/ .
Mar 26-Wed	Prince Kuhio Day Holiday
Apr 23	Administrative Professional's Day
May 11	Mother's Day
May 26	Memorial Day
Jun 11	King Kamehameha Day
Jul 4	Independence Day
Jul 12-15	Ohio Florists Association Short Course and Trade Show, Columbus, OH www.ofa.org/shortcourse .

Blue Iris - Color of the Year

Blue Iris has been selected as the color of 2008 by the experts at Pantone. Headquartered in Carlstadt, New Jersey, Pantone, Inc. is the world-renowned authority on color.

"From a color forecasting perspective, we have chosen Blue Iris as the color of the year, as it best represents color direction in 2008 for fashion, cosmetics and home products," explains Leatrice Eiseman, executive director of the Pantone Color Institute®. "As a reflection of the times, Blue Iris brings together the dependable aspect of blue, underscored by a strong, soul-searching purple cast. Emotionally, it is anchoring and meditative with a touch of magic. Look for it artfully combined with deeper plums, red-browns, yellow-greens, grapes and grays."

New Free Publications from CTAHR

The publications listed below by their subject category are now available for downloading from the CTAHR free publications Web page, <http://www.ctahr.hawaii.edu/freepubs>

Unless a publication is indicated to be Web only, printed copies, when available, are circulated to Hawaii libraries and to CES offices.

Food Safety and Technology

Clostridium botulinum in foods, Aurora Saulo, FST-28, 4 p.
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/FST-28.pdf>

Ornamentals and Flowers

Ornamental ginger, red and pink, Kent Kobayashi, Jan McEwen, Andy Kaufman, OF-37, 8 p.
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/OF-37.pdf>

Bougainvillea, Kent Kobayashi, James McConnell, John Griffis, OF-38, 12 p.
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/OF-38.pdf>

Using houseplants to clean indoor air, Kent Kobayashi, Andy Kaufman, John Griffis, James McConnell OF-39, 7 p.
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/OF-39.pdf>

Soil and Crop Management

Soils of Hawaii, Jonathan Deenik, T. McClellan, SCM-20, 8 p.
<http://www.ctahr.hawaii.edu/oc/freepubs/pdf/SCM-20.pdf>

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The doors of wisdom are never shut.  
- Ben Franklin

# Snail Pests Quickly Advancing

Before snails were pests in Hawaii, they were a treasured collectibles. Members of the endemic Hawaiian family Achatinellidae were collected to extinction. Of the 42 species on Oahu only 7 or maybe 8 remain and all but two are endangered.

<http://www.explorebiodiversity.com/Hawaii/BiodiversityForgotten/Wildlife.htm>

But the snails we see these days are exotic pests, some of which were brought to Hawaii deliberately. Some of the most common snails seen now days include the Giant African snail, *Achatina fulica* (Bowdich), the Small Garden snail, *Bradybaena similaris* (Ferussac), and the brown garden snail, *Helix aspersa* (Muller). All of which can be pests for ornamental nurseries. <http://www.extento.hawaii.edu/Kbase/urban/Site/slugs.htm>

*Euglandina rose* (Ferussac), the rosy predator snail, *Gonaxis kibweziensis* (Smith), the cannibal snail, and *Gonaxis quadrilateralis* (Preston), the carnivorous snail are three snails that were originally introduced into Hawaii to control the Giant African snail. They were effective in doing that, but now have become problems in themselves since they have moved into the wet forests to attack the native snails.

Recent introductions have plagued potted orchid and other nursery plant growers. *Zonitoides arboreus* (Say) also known as the bush snail, the orchid snail, or arboreal glass snail is an insidious pest since most of the damage is done to the plants' root systems. If there are enough roots to feed on, these snails never leave the pots and aren't noticed. Eventually the plant begins to show the stress of the continual feeding and damage to the root system.

<http://www2.ctahr.hawaii.edu/oc/freepubs/pdf/MP-1.pdf>

The latest noticed snail is a *Succinea* spp., also known as amber snails. These are aquatic snails that seem to have escaped from the aquarium trade. In their native habitats they are found

around ponds and damp marshy areas and feed on algae. This snail doesn't seem to cause a lot of damage to the plants themselves, but it is a serious quarantine problem. The snails are difficult to identify to the specie level because the differences are determined by the inner structures. The thin shell is often amber in color and almost transparent. It is about 4/10 of an inch (10 mm) long. Various species are native to a number of places in the world, including California, Florida, Samoa, New Zealand, Northern Europe and even Hawaii.

[http://www.cdfa.ca.gov/phpps/ppd/PDF/Succinea\\_spp.pdf](http://www.cdfa.ca.gov/phpps/ppd/PDF/Succinea_spp.pdf) or

<http://www.jaxshells.org/gallery.htm>

The big question is how to control these pests. The old saying "an ounce of prevention, is worth a pound of cure" is very true in the control of snails. Excluding them from the nursery in the first place is the best practice. Make sure any plants (or media and pots) you bring to your nursery are free of snails (and other pests). Place them in a quarantine area separate from your growing area. Only after you are 100% certain they are clean should you move them into your growing areas.

If you have a snail infestation already, start by establishing a snail-free area – perhaps one bench that you sanitize and use for only clean, snail-free plants. Make sure snails cannot move up the legs of the bench by using barriers of copper sprays, strips, snail bait, salt or distance. Make sure only snail free plants and materials are used in the clean area.

Molluscicides such as iron phosphate, metaldehyde and methiocarb are used in controlling most snails, but are not always effective with the *Succinea* spp. Liquid applications of metaldehyde seem to work better than some baits, since not all snails are attracted to various baits. Repeated applications 3 or 4 weeks apart are usually necessary. And continual monitoring is an absolute requirement for staying snail-free.

# Red Palm Mite Found in Florida

In December the Florida Department of Agriculture and Consumer Services announced the detection of the red palm mite, Raoiella indica, on a coconut palm in Palm Beach County. This is the first confirmed report of this serious plant pest in the United States.

Red palm mite is a pest of coconut, areca palm, and date palms in the Middle East and is widespread in tropical and subtropical regions throughout the Eastern Hemisphere. The red palm mite establishes colonies on the undersides of leaves. The adults, especially the females, are usually visible with the naked eye. When mites are feeding, especially at high mite densities, there is localized yellowing of the leaves followed by tissue death.

The red palm mite was first identified in the Western Hemisphere in 2004 on the island of Martinique. By 2006, the mite was reported in the Dominican Republic, Guadeloupe, Puerto Rico, Saint Martin and Trinidad-Tobago, St. Lucia and Dominica. In 2007 the US Virgin Islands, Granada, Haiti, Jamaica and Venezuela have been added to the list of islands and countries infested with the red palm mite.

In all instances, this mite has established itself on various palms, with significant outbreaks on coconut palms. In addition, infestations have been observed on banana and plantain species on most islands with additional infestations observed on heliconias, gingers, bird of paradise and screw pine.

The red palm mite can be distinguished from most spider mites (Tetranychidae) by the red color (including legs), long flattened bodies and absence of the webbing associated with many spider mites. All stages of the flat-bodied mite, including eggs, are red, and adult females often have black patches on their backs. Adult females are 0.32 mm long; males are smaller and triangular. The mites also have long body hairs with droplets of liquid at the tip.

Transport of infested plants or plant material appears to be the major mode of spread for this mite. Before finding the mite in Florida, red palm mites have been found on seed coconuts destined for Florida. In addition, handicrafts (hats, bowls, etc.) fashioned from coconut leaves and sold to tourists on many Caribbean islands infested with the red palm mite have been found to harbor live mites and viable eggs. These materials are prohibited from entering the U.S.

Under natural conditions, the red palm mite disperses on the wind along with most other plant feeding mites, so a strong tropical storm or hurricane could also distribute the red palm mite over a wide area.

There are pesticides that can control the red palm mite. Federal and state agriculture officials are working with the University of Florida's Institute of Food and Agricultural Sciences to develop treatment protocols. Long term plans are to find biological control agents that will keep the red palm mite in check. Some of the possible biological control agents that have been useful in the Eastern Hemisphere include predatory mites, lacewings, predatory beetles and other mite predators.

This is a pest of international quarantine significance and a direct threat to the ornamental palm and coconut industries in Florida, as well as a potential threat to these industries in Alabama, Arizona, California, Texas, and Hawaii.

APHIS PPQ has coordinated the formation of a technical working group of subject matter experts to identify methods and strategies for survey, detection, identification, and management of the red palm mite.

For photographs and additional information see: <http://www.sel.barc.usda.gov/acari/PDF/TrinidadHandout.pdf> and [http://www.doacs.state.fl.us/pi/enpp/en/to/red\\_palm\\_mite.html](http://www.doacs.state.fl.us/pi/enpp/en/to/red_palm_mite.html)

## Hawaii AgriTourism Association Formed

What do you get when you cross agriculture and tourism? You get AgriTourism and it has become a serious business all over Hawaii. Fruit, flower, vegetable and livestock farmers are drawing visitors from near and far, helping to preserve farms, create jobs, and boost the overall economy. It's the merging of Hawaii's top two industries to create something that is truly sustainable. It focuses on engaging the visitor with something that is both educational and enjoyable.

AgriTourism is nothing new. Family and friends have visited farms all over Hawaii from before the plantation era. What is new is the focus that state and local tourism and economic development groups are placing on agriculture.

The time for AgriTourism is right, as more people seek to buy locally grown food and become more health conscious. Consumers want to go to the farms and meet the people who grow their food. This interest alone has sparked a large movement to opening farms to the public for educational purposes that can also be rejuvenating and relaxing.

If you are involved with agriculture or are in the visitor industry and interested in AgriTourism as a way to sustain or diversify your farm or business, you will want to be a member of the Hawai'i AgriTourism Association. You can sign up by logging on to [www.hiagtourism.org](http://www.hiagtourism.org).

The next meeting will be on Wednesday, March 5 at 10 am to 1 pm. The meeting will be using the University of Hawaii Polycom (video conferencing) system. The Oahu site is on U.H. Manoa's campus in Gilmore Hall, Room 212. The site is subject to change due to class schedules so it is a good idea to check before the meeting to make sure the site hasn't changed. The Oahu contact is Jill Coryell 637-9995 e-mail: [hibiscuslady@hawaii.rr.com](mailto:hibiscuslady@hawaii.rr.com).

## Marketing Plan & Your AgriBusiness

Do you have a great product and want to grab the interest of potential customers? If so, you need to attend "Marketing Plan & Your Agribusiness" conducted by UH's Ag Incubator. The sessions will take you through how to both create and implement a marketing plan.

- Session 1 (Friday, February 22, 9am-12pm): What is a Marketing Plan and How can it Help Your Business?"
- Session 2 (Friday, February 29, 9am-12pm): Part 1 of the Plan
- Session 3 (Friday, March 7, 9am-12pm): Part 2 of the Plan
- Session 4 (Friday, March 14, 9am-12pm): Wrap-Up & Presentations

All Sessions will be held in HSPA Building, 3rd Floor, 99-193 Aiea Heights Drive, Aiea, HI 96701

Each session costs \$20 or \$60 for all 4 sessions

RSVP by February 15, 2008

To register and for more information, contact Matt Johnson at (808)483-8600 EXT 113.

Registration is limited to 20 people.

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If you have any questions or suggestions, give me a call at 622-4185, Tuesdays and Thursdays or e-mail me at mersino@hawaii.edu.

Mahalo!

Edwin F. Mersino
County Extension Agent
Agriculture Program

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There has been an alarming increase in the number of things we know nothing about.

-Scientific America

## “Ka Lono Pua” Goes Electronic

If you would like to receive “Ka Lono Pua” by e-mail, contact us so we can add your address to our listings. If you don’t have e-mail or we don’t know what it is, you will continue to receive a regular copy of “Ka Lono Pua.”

- Where can you go to get information on controlling the snails?
- What is AgriTourism and how can you get involved?
- How can you learn about marketing your business?
- What new pest invaded Florida?

The answer to these and many other questions can be found inside.