

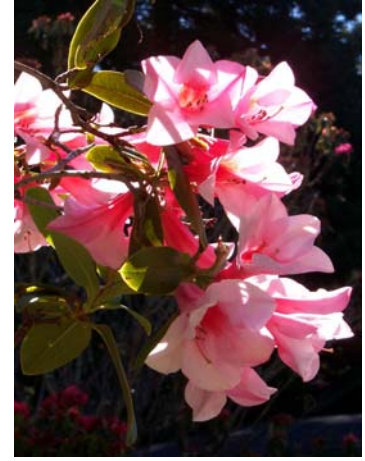
AMERICAN RHODODENDRON SOCIETY

Eureka Chapter

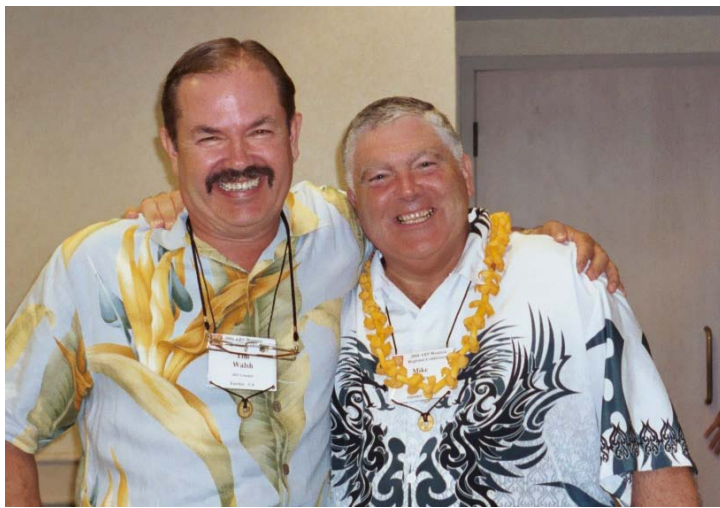
The next meeting

*Thursday, October 26 - 7:30 p.m.
Christ Church Episcopal
15th and H Streets
Eureka, California*

*Pre-Meeting No Host Dinner
5:15 p.m., Sea Grill, 316 E Street
Old Town, Eureka
Call Nelda for a reservation
443-8049*



October 2006



Mike Bones

Choosing Rhododendrons

Mike Bones, former District 4 Representative, will share his knowledge of rhododendrons and how to choose the best ones for your needs at the **Thursday October 26th** meeting at the Christ Church Episcopal at 15th and H Streets in Eureka.

Mike has been growing Rhododendrons for 44 years and has run Bones' Rhododendron Nursery for 27 years. Since retiring from his full time career of 30 years

in the Oregon State Parks system he now has a part time job of greeter at the Indian casino in his home town of Florence, Oregon. His stipulation for working at the casino as greeter was that he wear his signature shorts, being very proud of his legs.

Mike is the Membership Committee chair for the American Rhododendron Society. Mike and his wife Kathy have put the Siuslaw Chapter in Florence, Oregon on the rhodo map; they have been the royalty of Florence's spring Rhododendron Festival. Local interest in rhododendrons has grown as has the Siuslaw Chapter with his energetic support and enthusiasm.

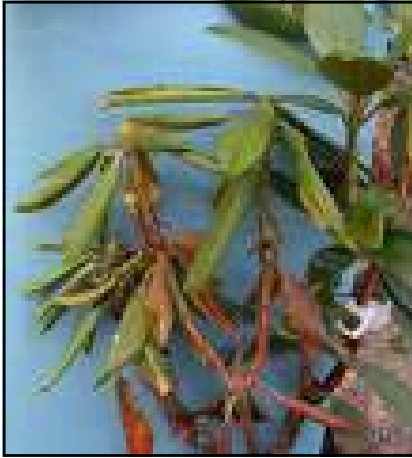
Mike will talk about rhododendrons and how you can find and choose the best ones for your particular needs. Mike's programs are uncommonly entertaining and educational. Mike is shown above with Tim Walsh at the 2004 Western Regional Conference in Hilo, Hawaii where their Aloha shirts were regular Society business attire. Mike is commonly seen wearing a large trash bag and his shorts on rainy rhododendron garden tours.

Photos are those of the Newsletter editor, June Walsh, unless otherwise noted. Permission is granted to reprint any portion of this publication provided credit to the author and Chapter is given.

WORD OF THE MONTH

By, Bruce Palmer

This month's word is "Phytophthora". The name comes from the Greek words for plant and destroyer. That's appropriate given that the genus is responsible for the potato famine that may have driven Tim Walsh's ancestors out of Ireland as well as for the current local disease "sudden oak death" in oaks, rhododendrons and other plants. The word comes up this month because Bay Area researchers reported in September in the journal *Science* that they have sequenced the genes in *Phytophthora ramorum*, the sudden oak death pathogen, as well as the genes of *P. sojae*, the cause of soybean root rot, and that another group has sequenced about half of the genes of *P. infestans*, the cause of potato blight. *Phytophthora* is a strange genus. Formerly grouped with fungi in a category popularly called water molds, it is currently put in a kingdom with kelp. In terms of DNA, animals and fungi have more in common with each other than either group has in common with *Phytophthora*. Sequencing the genes is important because it can lead to a specific cure. In



addition it provides new understandings of the group. It turns out that the *Phytophthora* species tested have about ten times as many genes that produce substances to attack plants as do pathogenic bacteria, so it's no wonder they are such bad actors. Also, the researchers found many more variants of *P. ramorum* in nurseries than in the wild. Don't hold your breath, but eventually as a result of research such as this, we may learn to control *Phytophthora* in all its deadly variations.

*The rhododendron at left has been infected by *Phytophthora ramorum*.*

Membership Renewal

If you have not sent in your membership renewal, do it now!!! There is a stamp on the renewal envelope that you received last month. All you have to do is put your check in the envelope and send it...today! The Renewal deadline is November 15th. Call June if you have any questions: 707-443-0604

Biological Controls for Rhododendron Pests

Although spraying chemical insecticides and fungicides to control pests on rhododendrons has been the recommended method for many years, interest in safer, more natural controls has created a new market for companies specializing in biological controls. These recently developed biological controls fall into a few categories; predators, pathogens, and microbe colonization.

Predators

Predatory insects prey on other insects. A predator that works well to control two rhododendron pests, thrips and weevils, is the predator soil mite **Hypoaspis miles**. When applied to the ground, this mite will feed on the larval stage of both thrips and weevils in the soil. Complete eradication of pests is not usually the outcome, but populations of thrips and weevils will be seriously impacted. The really great thing though is that this soil mite will establish populations that stay in the ground for some time. Available and shipped in a tube filled with vermiculite and peat, this predatory insect can be applied by shaking the carrying medium onto the ground below your plant. These tubes have around 25,000 mites each, and can treat 40-50 plants. The retail price is around \$40 for a tube or around \$1.00 per plant.

Another excellent predator for thrips is **Amblyseius cucumeris**: the thrip predator. This predator lives on the leaves and feeds on the young stages of thrips. They will eat about 5 larvae per day. Release rates are about 100-500 per plant. They are available in little bags of 300 predators. These small bags should be hung onto the branches of the plant. The predators crawl out through a small hole in the bag and onto the plant, feeding on the thrip larvae. One bag per plant is recommended. Suggested retail is \$3.00 per bag that contains 300 predators.

Pathogens

Another biological control that works well are nematodes, which are classified as pathogens. These little worm like critters move through the moist soil and burrow into the larvae of the Strawberry Root Weevil and the Black Vine Weevil, the two most destructive insects to rhododendrons. If your leaves have little 'notches' around the edges, you have weevils in your garden. Weevils are nocturnal feeders, so you can go out on 'Weevil Patrol' at night with a flashlight and see these little brown beetles feeding on your prized plants.

There are two species of Nematodes (**Heterorhabditis marilatus** and **Heterorhabditis bacteriophora**) that control these pests. They are generally sold together in a packet that will treat approximately 300 sq. ft. of ground. Fall application is recommended when the soil temperatures are above 50 F. and when there is moisture in the soil. September into October is the best time. Mix with water and saturate soil around damaged plants. A pump sprayer is the easiest way to apply the nematodes. Keep soil somewhat moist during this time.

One packet will treat 3000 sq. ft. Suggested retail is \$20.00 per packet.

Microbe Colonization

Recent studies around a new patented product are quite promising for prevention of soil borne diseases including Phytophthora, and foliar diseases such as Powdery Mildew. Both of these diseases are a scourge for us rhodie growers, and a natural control like this is of interest. The product is sold under the label **Actinovate SP** and is a high concentration of a patented beneficial bacterium on a 100% water soluble powder. When used as a preventative, researchers have seen Actinovate® SP work as well or better than most chemicals. The bacterium is called **Streptomyces lydicus** and when introduced into the soil this microbe colonizes and grows around the root system of plants. While settling in the root's rhizosphere the microbe forms a synergetic relationship, feeding off of the plant's waste materials while secreting beneficial and protective by-products. This combination of the colonization and the protective secretions forms a defensive barrier around the root system of the plant which in turn suppresses and controls soil pathogens. *S. lydicus* also has been shown to prey on certain pathogens, disrupting their cell walls and disabling them in the process. Finally, the by-products of the Actinovate® microorganism also aid plants by assisting in the complex conversion of some of the minerals and micronutrients found in the soil, allowing easier uptake and, thus, creating a stronger, more robust plant.

When sprayed onto the leaves of plants as a foliar spray, the microbe forms a layer on the leaves and stems, suppressing diseases such as Powdery Mildew.

The only unfortunate aspect is that, at this time, Actinovate is only sold in packs to treat 50 gallons of water, so is not really a 'home owner' product yet.

By: Don S. Wallace owner of Singing Tree Gardens Nursery

Anyone interested in trying these products can contact Don S. Wallace at Singing Tree Gardens Nursery 707-839-8777.



Eureka Chapter is published monthly except during July and August. Submissions from members are encouraged and should be mailed to June Walsh, Bulletin Editor, 2050 Irving Drive, Eureka, CA 95503-7022. Membership information and applications are also available from June Walsh. Eureka Chapter is a member of the Humboldt Botanical Gardens Foundation, Eureka, Calif, and The Rhododendron Species Foundation, Federal Way, Wash. Eureka Chapter is a chapter of the American Rhododendron Society.

Eureka Chapter

Eureka Chapter/American Rhododendron Society
2050 Irving Drive
Eureka, CA 95503-7022

Future Programs

- October 26 2006** **Mike Bones**, Choosing the Correct Rhododendrons for Your Needs
Rhodo 101, Taking and Sticking Cuttings
- November** No meeting, Eat turkey or tofu!
- December 7, 2006** **Potluck**, Member and guest show-and-tell, plant exchange, seed swap
- January 25, 2007** **Bryn Homsy**, UCSB, Landscape Design History
Rhodo 101, Bring your dirt for do-it-yourself soil test
- February 22, 2007** **Dr. Paul Anderson**, Australia and New Zealand
- March 22, 2007** Invited, Sue Natzler or Wilbur Bluhm
- April 12-15, 2007** **American Rhododendron Convention, San Francisco, www.ars2007conf.org**
- April 16-18** **Post Convention tour of Quarryhill, wine country and Mendocino gardens, www.ars2007conf.org**
- April 26, 2007** Invited, Mike Stewart
Rhodo 101, Arrangers' Guild
- April 28, 2007** **Flower Show and Plant Sale**
- April 29, 2007** **Garden Tour and Plant Sale**
- May 24, 2007** Member and guest **Mini-Flower** show. Participants will be judging entries.
Rhodo 101, how to judge a show, Jerry Reynolds
- June** Date to be determined, **Potluck!**
- Meetings will take place at the Christ Church Episcopal at 15th and H Streets in Eureka at 7:30 p.m. unless otherwise announced. Programs may change as speakers' schedules may change.



On Saturday October 14th Humboldt Botanical Garden held an open house. There were two special tours for the Eureka Chapter ARS. June Walsh led one tour on foot and Tim Walsh led the other by tractor/trailer. It was exciting to see the Garden's progress over the last few months of construction. *Pictures by Jim Wasetis.*