

FRATERNAL

Official Bulletin Of The

Volume 20 # 1 INTERNATIONAL HOYA ASSOCIATION Jan-Mar 2007



International Hoya Association

Administrative Office:
4057 Carlton Avenue
Central Point, Oregon 97502-1749
Phone: (541) 664-6808
E-Mail: hoyaannie@aol.com
A Non-profit Organization
Bulletin Published Quarterly.
ISSN 10055-4564
web page: www.international-hoya.org

2007 rates for a 1 year membership (USA), which includes our quarterly publication are \$25.00 per year. Outside the United States: U.S. \$35.00 per year, sent via airmail.

Officers and Editors

President	Dale Kloppenburg
Vice President	Chuck Everson
Secretary/Treasurer	Ann Wayman
Editor	Ann Wayman
Web Administrator	Tony Mace
Advertising Manager	Chuck Everson

Board Of Directors

Dale Kloppenburg	Ann Strahm
Ted Green	William Wayman
Mark Randal	Chuck Everson
Carol Noel	(Chairman)

Correspondence Secretary

Ann Strahm
1150 Darlene Lane Apt. 131
Eugene, Oregon 97401

E-mail:
hoya.fraterna@gmail.com

Membership Secretary

Sandra Cook
P.O. Box 1484
e-mail: fraterna@povn.com Priest River, ID 83856

Honorary Board Members

Representing Europe:	Eva-Karin Wiberg
Representing S.E. Asia:	Kim Yap
In charge of renewal notices	Sandra Cook
In charge of slide library	Tamalla Frank

I.H.A. Affiliates

San Diego Exotic Plant and Hoya Group, San Diego, California.
Svenska Hoya Sallskapet, Sweden.



Hoya retusa Dalzell

We have a new Research Department headed by Dale Kloppenburg as director. His new assistant is Mark Randal.

Editorial Policy

Errors of fact may occur from time to time in "Fraterna", it is the policy of the IHA to publish corrections of fact, but will not comment on matters of opinion expressed in other publications.

"Fraterna" is the official quarterly bulletin published by the International Hoya Association. The administrative office is located at 4057 Carlton Ave., Central Point, OR 97502-1749

Opinions stated in articles and editorials of Fraterna do not necessarily represent opinions of other I.H.A. members, The Board of Directors, or its officers. All articles submitted to Fraterna for possible publication may be edited for grammar, form and content. All material in Fraterna may be reprinted by non-profit organizations (unless permission is expressly denied in a note accompanying the material) provided that proper credit is given to I.H.A. Fraterna and the author, and one copy of the publication containing the reprint be sent to the I.H.A. administrative office. No reproduction in whole or in part by any other organization, publication or individual, is permitted except by permission of the editor.

Editor's e-mail address:
"Ann Wayman" <hoochymama007@hotmail.com>
Or <hoyaannie@aol.com>

Be sure to mention in the subject area, Fraterna or IHA so your e-mail won't be placed in a spam folder.

TABLE OF CONTENTS

Page .	Front Cover: <i>Hoya australis</i> ssp. <i>australis</i> cv. Brookfield (Photo by Marcy Durst) .
Page 2	Declaration/Masthead
Page 3	Table of Contents
Page 4	Editors Note
Page 5-14	<i>Hoya australis</i> article by Mark Randal (Photos by Mark R., D. Liddle & A. Wayman)
Page 15	Old/New <i>Hoya</i> House in Vista, Calif.
Page 16	<i>Hoya</i> Favorites.... <i>H. obscura</i> by Ann Wayman
Page 17-18	<i>Hoya</i> Favorites.... <i>H. siariae</i> by Ann Wayman + photos by Monina Siar
Page 19	Photo Gallery Descriptions (by Ann Wayman)
Page 20	Photo Gallery (Photo Layout by Ann Wayman).
Page 21-23	Advertising
Page 24	Back Cover

Note from the Editor

Have you all had the opportunity to check out our new web page at www.international-hoya.org. There are still changes and improvements to be made but so far, we have set up a totally new system of charging your subscription, or any other offers (such as back issues etc.) using credit cards. You will see the pay pal logo, however, pay pal is just the service that will be processing your cards. You do not need to have an account with pay pal to use this service. We can now accept, Visa, Mastercard, American Express and Discover cards. We also do have a pay pal account for those of you who have an account with pay pal and would like to use that method. The account is under hoochymama007@hotmail.com. We get immediate confirmation via e-mail of your renewal or new subscription using either method.

There may be some of you who prefer to pay by check or money order. We can accomodate you also. Sandra Cook has volunteered to be our new membership secretary and all checks or money orders should be mailed directly to her at Sandra Cook, Membership Secretary, P.O. Box 1484, Priest River, Idaho 83856.

We will be reviving our slide show production with almost all new photos, but with the twist of your choice of slides if you have a slide projector or by DVD/CD Rom, if you would like to view the photos on a computer or on your tv screen. We don't have all the bugs out of this project yet but it's being worked on and should be available within a few months. These photo shows consist of 100 of some of the best hoyo photos around by some of the best photographers. They come with complete identity and description notes for those of you who would like to have a hoyo party. There is no charge to any of our members for checking out these slide shows. We do ask that you pay for postage and insurance and in the case of slides we ask for a \$35.00 deposit check, which will be returned uncashed when the slides are returned. There is no deposit required on the CD's. Tammi Frank is our new slide librarian and should be contacted directly at Tammi Frank, 39 Wildwood Dr., Prescott, Arizona 86305, or e-mail wtfrank@peoplepc.com if you are interested in checking out our photo show.

As was mentioned in the last issue of *Fraterna*, we have regretablely had to raise our subscription prices in order to keep up with the rising costs of producing our newsletter and paying all the other costs that go along with managing an International Organization. We sincerely hope it won't be a hardship and that you will all renew and stay with us.

I'm sure that some of you noticed in the last issue of *Fraterna* that the number of pages did not match the number of pages listed in the table of contents. This happened when I was getting the issues ready to be mailed and discovered that they had exceeded the weight limit. This excess in weight brought this issue to over 4 ounces and would have cost close to \$200.00 more for overseas postage, so I pulled two sheets of paper which consisted of the advertising pages and the back cover which was blank. I'm sorry for the inconvenience. I promise to be more aware of weight limits before I make up the table of contents from now on.

Ann Wayman (Editor)

Hoya australis

by Mark Randal



Figure 1

HISTORY - Hoya australis was first collected by Europeans in 1770, by Banks and Solander, two of the scientists aboard James Cook's ship HMS Endeavor on his first voyage of discovery to the Pacific. The plant material was collected from Cape Grafton near Cairns, Queensland, on the Northeastern coast of Australia. The pacific island form of the plant was next collected from Tanna by George Forster, the Botanical Collector and draftsman on Cook's second voyage of discovery. Forster assigned it the name Asclepias volubilis, a name associated with a number of other species.

In 1810 Robert Brown created the genus Hoya. He moved two plants from the Genus Asclepias (Linnaeus) into this new Genus; Hoya carnosa (including the australis material), as the Holotype for the Genus, and Hoya viridiflora which was later moved out of the genus. The name Hoya australis was published in 1827 by James Traill, based on the Australian collection of Banks and Solander. Subsequent authors named plants from a number of areas in Australia and Papuaia which were later combined within Hoya australis by David Liddle and Paul Forster in the 1990's. They ultimately published/republished the complex as five separate sub-species.

The **Hoya australis** complex has spread throughout the world in cultivation, giving rise to numerous cultivars, varieties and hybrids (as well as many confusing and arbitrary designations). It is now one of the most popular and common species in cultivation, third only perhaps to **H. carnosa** and **H. bella**. Recently **H. australis** ssp. **oramicola** has been classified as a “vulnerable” species by the IUCN (International Union for the Conservation of Nature). More recently **Hoya australis** has begun to naturalize in Hawaii. Carol Noel recently found a seedling she has identified as **H. australis** ssp. **australis** growing near the beach which she has collected and introduced to the trade as **Hoya australis** ssp. **australis** from Kapoho.

TAXONOMY- **Hoya australis** is in the hoyo section Pterostelma. Other members of this section are **H. calycina**, **H. naumanii**, **H. albiflora**, **H. magnifica**, and **H. subcalva** (syn. BSI-1). The specific epithet "australis" refers to the latin term for 'southern', not specifically to Australia. The five subspecies of australis have very similar flowers, too similar to warrant separating any of them into species status of their own. Since the leaf structure and growth habit of these plants varies so widely, they have been broken up into five subspecies groups based on leaf morphology and habit.



Figure 2: Close - up shot of flowers of H. australis ssp. australis

Here are the recognized subspecies, their publishers, and their synonyms (provided by David Liddle):

Hoya australis R. Br. ex Traill; Hoya dalrympliana F. Mueller; Hoya keysii F.M. Bailey; Hoya pubescens Reinecke; Hoya oligotricha ssp. oligotricha K. Hill

Gymnema recurvifolium Blume; Hoya bicarinata A. Gray; Hoya papillantha Schumann; Hoya lactea S. Moore; Hoya oligotricha ssp. tenuipes K.Hill.

Hoya australis ssp. rupicola, K. Hill

Hoya australis ssp. sanae, (Bailey) K. Hill

Hoya australis ssp. oramicola, Forster and Liddle

An easy way to keep the differences between subspecies in mind is to picture the progression of Hoya australis from a moisture loving, rain forest plant (ssp. tenuipes) to the drought tolerant succulent plant ssp. rupicola as it progressed into drier, harsher terrain. H. australis ssp. tenuipes has relatively thin leaves and delicate stems. H. australis ssp. australis would be the first step in this transition, having thicker, tougher leaves and stems. H. australis ssp. sanae has yet thicker, more succulent leaves and a more compact habit. H. australis ssp. oramicola verges on being a true succulent. with thick, heavy leaves but yet with a twining habit.

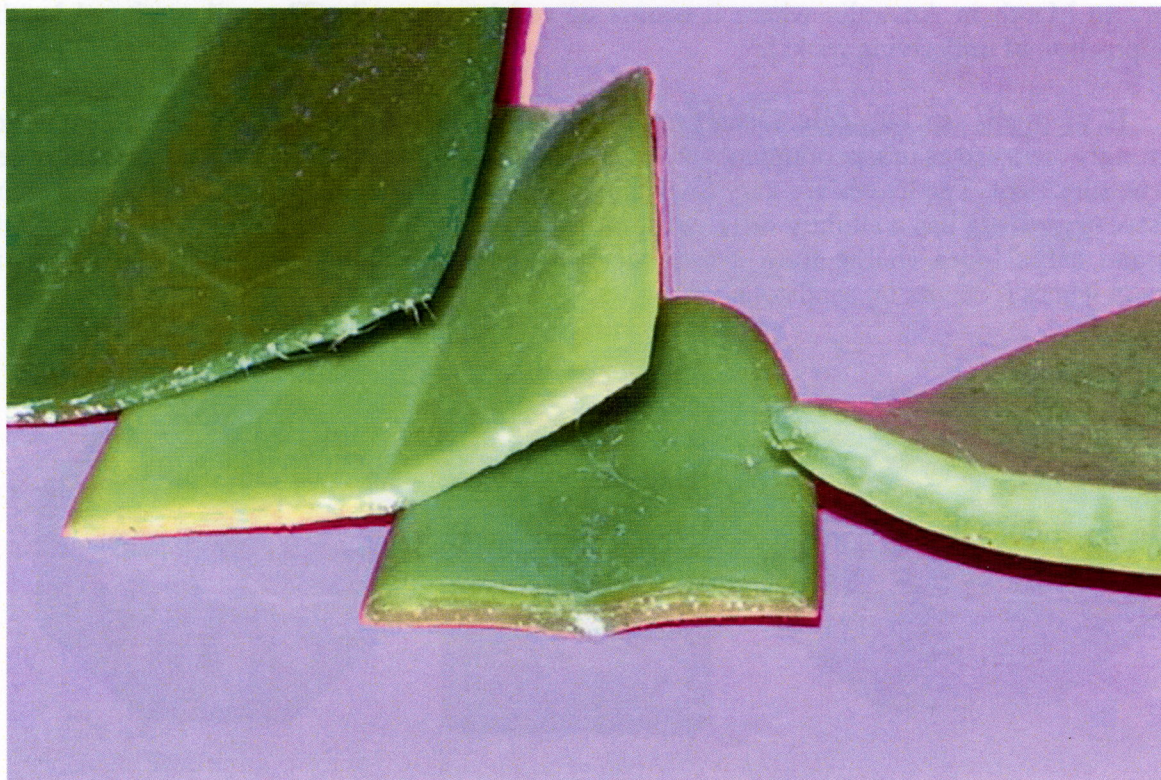


Figure 3: L-R *H. australis* ssp. *tenuipes*, ssp. *australis*, ssp. *sanae* and ssp. *oramicola*

Hoya australis ssp. rupicola would be the final step, a true succulent plant with thick stems and very fat, hard leaves placed close together at the stem tips. It is highly unlikely that the plants did progress in this neat fashion, one superseding the other as it moved into harsher environments, but a similar transition probably took place for ssp. **rupicola**.

Here are some brief descriptions of typical plants of these 5 subspecies:

H. australis ssp. tenuipies: This ssp. is always glabrous (leaves and stems hairless). The umbel (flower cluster) is loose and has clear white, starry flowers. The flowers are smaller and the pedicels thinner than ssp. australis. It comes from a moister environment than the other ssp. Flowers heaviest September to October in Australia, spring in the northern hemisphere.

H. australis ssp. australis: Can be glabrous or pubescent (leaves covered with fine hair), the umbel is a tight collection of flowers that can be relatively small or large. Most specimens in cultivation are probably of this ssp. It is quite variable, with many different leaf forms. Flowers heaviest March to May in Australia, fall/winter in the northern hemisphere.

H. australis ssp. sanae: pubescence varies but is always pubescent to some degree. This ssp. is more xerophytic (adapted to growing under dryer conditions) than the two above, but still viney. It has small quilted leaves that have recurved edges. Flowers May to July in Australia. It occurs on sand near the beach in Australia.

H. australis ssp. oramicola: Mostly glabrous with medium size flowers, has bright green, more succulent leaves than sanae. It twines, and is not bush-like, it has thick quilted leaves. Flowers January to March in Australia where it occurs on red laterite soils (The soil produced by the decomposition of underlying rocks).

H. australis ssp. rupicola: Densely pubescent to glabrous, very succulent leaves, leaf edges not strongly recurved as in ssp. oramicola or ssp. sanae. It is very xerophytic, and could be classified as a true succulent. The leaves are very thick and smooth, with no quilting. This subspecies along with ssp. **oramicola** has a slightly different floral structure than the first three, with short corolla lobes and calyx lobes visible from above between the sinuses. Flowers January to March in Australia where it occurs on sandstone.



These 3 photos by Ann Wayman (L) A surprise flowering of H. ssp. australis with pink splashes on the petals. (Center) H. ssp. australis foliage. (R) A typical H. australis flower.

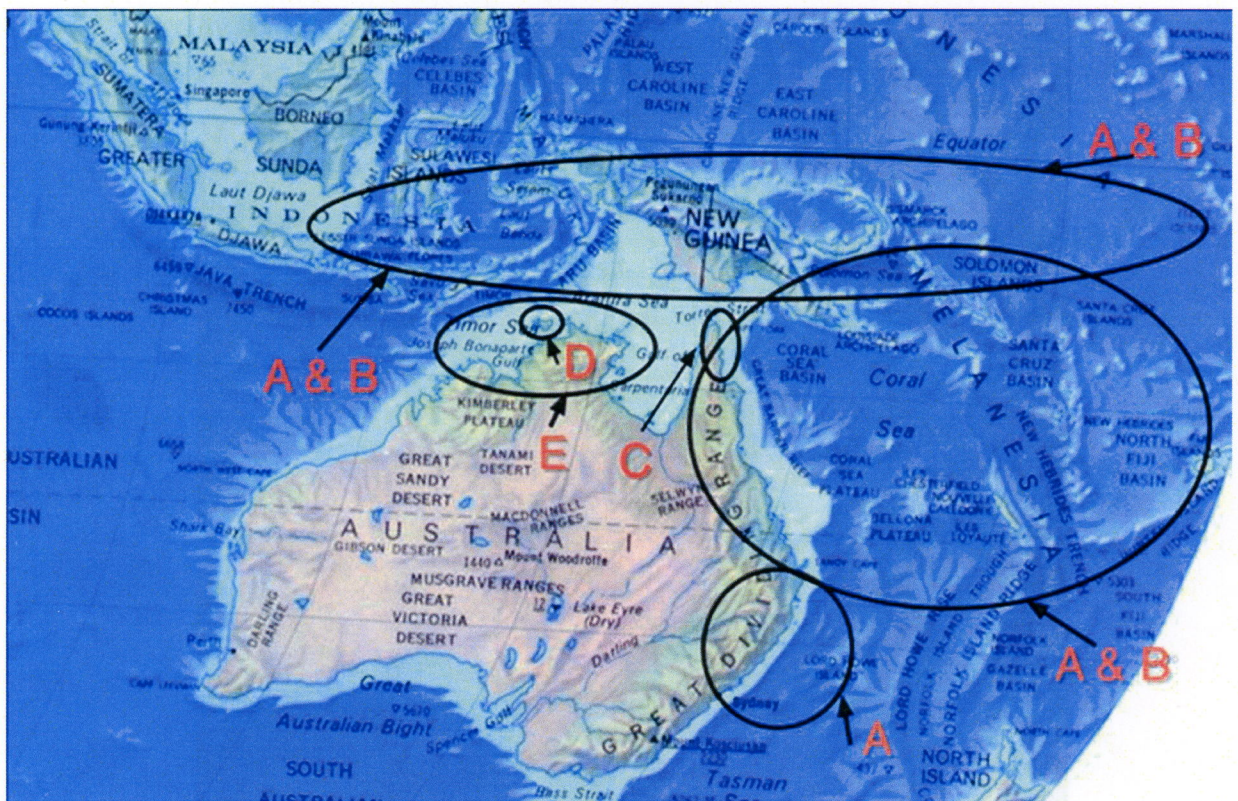


Figure 4: Distribution map for A: ssp. australis, B: ssp. tenuipes, C: ssp. sanae, D: ssp. oramicola, E: ssp. rupicola. The areas for each subspecies are approximate, intended to show the general distribution area. Most Australian plant colonies occur near or on the coast.

In order to try and lessen the confusion that often surrounds H. australis ssp. tenuipes and H. australis ssp. australis, it should be noted that there are two (at least) schools of thought on the matter. One position suggests that the plant described above as ssp. tenuipes should be described as ssp. australis and vice-versa. In this case the researchers recognize the different subspecies and differ only on the point of these two subspecies names. The groups of plants representing each subspecies are well established.

DISTRIBUTION- All ssp. of H. australis are found naturally occurring on the Australian continent.

H. australis ssp. australis occurs along the northeastern coast of Australia, in Papua New Guinea, Indonesia and Melanesia. This subspecies occurs in a wide variety of environments, from dry, rocky outcrops to open forest and vine thickets. This is the most widespread and varied of the lot.

H. australis ssp. tenuipes is also found on the northeastern coast of Australia in Queensland, as well as New Guinea, The Solomon Islands and Melanesia. This subspecies is found in relatively moist areas of forest or mangrove swamps.



Figure 5: Cutting of H. ssp. rupicola. Note the very thick, succulent leaves and stem.

H. australis ssp. **sanae** is found only in vine thickets on white sand dunes near the beach in Queensland and some nearby offshore Islands.

H. australis ssp. **oramicola** occurs only on two islands, Melville and Bathurstt, off the northern coast of the Northern Territory near Darwin, in vine thickets on red laterite.

H. australis ssp. **rupicola** occurs near Kimberly Plateau, on Western Australia's northern shore, as well as the coast of the Northern Territory. It is found primarily on dry, exposed limestone outcrops.

CULTIVARS/FORMS/HYBRIDS: There are many varieties of ssp. australis. Here are some of the most well known.

cv. 'Brookfield', is a variety of **H. australis** ssp **australis** with bronze new growth and larger flowers. It is sold by David Liddle from his Australian nursery.

cv. 'Mrs. G', is distributed in America by a few dealers. It was published by Carol Noel, and is said by her to have a more compact and floriferous habit. A clone of the **H. australis** complex.

cv. 'Lisa', is a lovely variegated form with pink, yellow and several shades of green in complex patterns. New growth is often tinged purple. A sport of the **H. australis** complex. Very new to cultivation and hard to find.

cv. 'variegata', there are at least 3 variegated clones of the **H. australis** complex in cultivation, all are beautiful, all are fairly easy to grow.

H. australis ssp. **australis** from Kapoho, with huge leaves and good flowering habit is sold by Aloha Hoya Nursery in Hawaii.

H. australis 'Tonga' (listed also as *H. ssp. tonga*) is another large leaved form with large flowers. Sold by Ted Green at www.rarehoyas.com-catalog.

There are many natural varieties in the **H. australis** complex. Leaf shades ranging from very dark green to pale olive to shades of yellow-green. Leaves may be small 1"x1" (2.54 cm. x 2.54 cm.) to large 9"x6" (23cm.x16cm.), and may be glabrous (hairless) or covered with fine hairs. Flowers vary somewhat less, ranging in size from ½" (1.27cm.) to nearly 1" (2.54cm.) and almost always white with a stain of carmine under the corona. The carmine color is usually reduced on ssp. **tenuipes**. Some clones display more carmine markings on the corolla petals, a very few show a degree of pink blush on the corona.

There are hybrids of **H. australis** and **H.subcalva** (syn. BSI-1) which are represented by more than one clone. One offered by Aloha Hoyas was made by Ed Gilding. He was attempting to cross **H. australis** with **H. cembra** (syn. **H. odorata**) and attempted to add **H. subcalva** to the mix to encourage the embryo to develop (distantly related hoyas such as **H. australis** and **H. cembra** do not cross easily, if at all). Judging from the resulting seedlings, however, he decided that **H. cembra** had not contributed to the hybrid. Another clone is offered by Ted Green, this one is named **Hoya** cv. 'Pinkie', and has been around for several decades. There have been speculations made by several experts that **Hoya naumanii** may be a naturally occurring hybrid of **H. australis** and **H. subcalva** as well. It was collected around 1980 on Gizo. **H. australis** and **H. subcalva** both occur in the area.



Figure 6: A hybrid of H. australis and H. subcalva....This photo is my own BSI-1 x australis, received from AlohaHoya.

Cultivation: The different subspecies of the H. australis complex are generally of easy culture, given a loose, well draining potting medium. This is particularly important with the more succulent plants represented by H. ssp. sanae, H. ssp. oramicola, and H. ssp. rupicola. All of these succulent type subspecies prefer almost full sun.

H. australis ssp. tenuipes can handle more water than the other subspecies due to its rain forest origin. It is probably the least appealing of the subspecies for cultivation owing to its close resemblance to some forms of ssp. australis combined with its less reliable flowering habit. Plants may often fail to bloom in spring and flowering is of shorter duration and less flowers than H. australis ssp. australis. I may be treated like H. ssp. australis as they have basically the same growth habit. They both prefer a warm locale with partial sun.



Figure 7: Cultivation techniques make a big difference in the appearance of the H. australis ssp. These two examples of H. ssp. oramicola were grown in very different conditions. The one on the left was grown as a succulent in bright light, with minimal water. The one on the right was grown as a tropical with partial sun, high humidity and abundant water.

H. australis ssp. **australis** is the most vigorous of the subspecies. It is strongly upright growing and does well on a three foot (.915M) to four foot (1.22M) trellis. Crossed bamboo U's in 4 foot (1.22M) lengths make a perfect support. Long tendrils are best left to attain several feet of growth above the apex (top) of the plant before being tied down, as it often slows growth when their growth points are lowered. It will also perform well as a hanging plant, although it will require more tending to keep the rampant growth confined to a reasonable space. **H.** ssp. **australis** requires moderate watering, preferring to dry slightly between waterings. Plants should not be kept moist at all times. **H.** ssp. **australis** will have a large flush of flowering in August/September in the northern hemisphere and continue to flower sporadically through January with adequate heat and light. **H.** ssp. **australis** can tolerate cooler conditions than most of the australis subspecies, with some clones tolerating temperatures into the 40's if kept fairly dry. It prefers full to partial sun.

H. ssp. **sanae** has a more restrained growth habit than **H.** ssp. **australis**, and this combined with its delicate appearing, smaller leaves makes it a good candidate for a hanging basket, though it will also twine on a trellis. It also prefers to dry between waterings and should be kept generally much drier in winter. When it's kept very dry, the leaves will roll laterally nearly into tubes during the dry season. An adaptation to expose less of the leaf surface to the bright light of its native habitats dry season. Keep it warm and give it full to partial sun.

H. ssp. **oramicola** is slower growing than **H.** ssp. **australis** but can put out long, vigorous tendrils. These can be problematic, as the leaves are quite succulent and heavy. A smaller trellis is essential to keep this plant looking its best. **H.** ssp. **oramicola** also prefers to dry out similarly to **H.** ssp. **sanae** and should be kept much drier during the winter. A heavy clay pot is good for this plant, as it can become quite top-heavy especially in a plastic container. Keep the temperature over 59° Fahrenheit (15° Celsius), and give it almost full sun.

H. ssp. **rupicola** is the most challenging subspecies of the *Hoya australis* complex. The thick, heavy stems are difficult to root, tending to rot if not exposed to lots of soil oxygen. Careful attention must be paid to watering at all times. Plants should never be kept moist. Watering once a week for plants well established in their pots and growing well is sufficient. During dormant periods water may be required only once or twice a month. This subspecies also requires a heavy clay pot as the leaves are extremely thick and heavy and prone to tip over if not weighted. Full sun is a must for this subspecies and it prefers temperatures over 59° Fahrenheit (15° Celsius).

TRIVIA- *Hoya australis* can be toxic to cattle and certain other livestock if consumed in large quantities. According to Dr. Ross McKenzie in his 1993 paper "Australian Native Poisonous Plants", "**(Hoya australis)** growing in the softwood scrubs of Queensland has been used as drought fodder for cattle. Too much will damage spinal function and the cattle will collapse and may die". I have found no reports of toxicity to humans or household pets.

There are many traditional remedies involving *Hoya australis* used by Pacific Islanders. In Fiji it is (was) used to treat swollen testicles and hemorrhoids. In Tonga and Samoa it was used to combat inflammation and convulsions.

Hoya australis uses a procedure known as Crassulacean Acid Metabolism (or CAM). In this process the plant closes its stomata (pores) during the day to reduce the water loss which occurs during transpiration. It opens its stomata at night to take in CO₂ and release oxygen. Note- this doesn't mean that *australis* should be watered at night- it will take in water when it is available, and breathe on it's own schedule.

Hoya australis probably has several pollinators in habitat. One well documented one is **Ocybadistes walkeri**, usually grouped with butterflies although it is moth-like, and is diurnal. Birds pollinate clones of *H. australis* in David Liddle's Australian nursery, and in cultivation elsewhere it has been reportedly bee-pollinated. It's white flowers and heavy scent suggest that it may have a nocturnal pollinator, although these traits may have evolved to attract dawn or dusk-active species.

Last but not least, the fragrance of *Hoya australis* is arguably one of the best in the Genus. Not at all like honeysuckle, which it has been said to resemble, it is much less cloying and somehow heavier. It has the scent of cherry candy and ginger, with an undertone of chocolate.

Acknowledgments: My gratitude to David Liddle for his generous help in all aspects of this paper, and for his work in the field generally and specifically for his excellent paper **Variation in Hoya Australis R. BR. ex Trail.**

by Mark Randal San Francisco, 2006



Figure 8: Subspecies (L-R) *H. ssp. australis*, *H. ssp. oramicola*, *H. ssp. sanae*.



Old/New Hoya House in Vista, California

Back in 2001, Jerry and I decided to sell all of our hoya stock since we had discontinued the mail-order business and felt that 1,000 large hoyas were just too much to handle. So we sold them to a nurseryman in Pennsylvania, who came out, boxed them up and trucked them back to his nursery. For the past few years, the only hoyas we have offered to our walk-in customers were those we purchased wholesale. I've always loved hoyas, and missed having them around. So slowly I have started collecting them again, purchasing them, getting cuttings and plants off of our raffle table

In the same year (2001) we also sold all of our Christmas and Easter Cactus stock to the same nursery in Pennsylvania, so our little Easter Cactus greenhouse was empty. I decided to move all of my hoyas into the Easter Cactus house. The size of this house is 10' by 30', with the top covered in Plexiglass and the rest covered in netting. It's a little dark, but it stays warm in the summer, and in the winter I cover it in plastic so the temperature never gets below 50°Fahrenheit (10°Celsius). When I put the plants in the greenhouse last January, the plants looked very pale and hadn't been growing much. So I decided to begin a weekly vigil of fertilizing as I watered, using Miracle Grow liquid fertilizer. This method of fertilizing is really unique (and easy). It comes in a bottle and you screw it on the end of your water hose and turn the knob to 'feed'. Everytime you water your plants, a little bit of this fertilizer goes into the pot. Within one week I began to notice a change in the plants. They were starting to perk up and looked healthy and green again. Within three weeks I noticed new growth appearing on just about every hoya. I can hardly wait to see and smell those glorious hoya flowers again. This is my 'secret garden' seems I am hooked on hoyas again!

By Charles Everson

SOME NEW, and not so new HOYA STARS

It's been quite some time since I have gone through my greenhouse and really evaluated the growth and flowering qualities of the newer hoyas that I've collected in the past 5 years. These plants are not necessarily new to the trade but either new to me, or I've had them before and lost them or inadvertently sold them before I had cuttings taken. I actually like to watch a plants progress through about 5 flowering periods before I make any snap judgements as to whether it can qualify as a favorite. One of my all time favorites and one that I've probably featured before is *H. obscura*, especially the bronze leaf variety whose foliage turns a beautiful mahogany color in the winter sun. This species is from the Philippines. Keep it warm and mist often to keep the humidity high. It requires a barely moist soil that is never allowed to dry out completely. It likes a lot of very bright light but no direct sunshine unless it's very early morning sun. I like to give it a few feedings of a good fish fertilizer early in the spring to give it a good start, then switch to a balanced formula of Peter's or Schultz brand fertilizer the rest of the summer. This species can have 15 to 20 umbels of 15 to 20 flowers open at once in each umbel. In my opinion the very light allspice fragrance of these flowers are one of the nicest of all the hoya species.

H. obscura Elmer ex Merrill ex Burton



Hoya siariae Kloppenburg

This hoya is quite new to my collection, acquiring it just a little over two years ago. It was originally collected in Tayabas, Quezon, Philippines, and published by Dale Kloppenburg. Named *H. siariae* in honor of Dr. Simoena Siar.

The first thing about this species that attracted my attention was the beautiful foliage. It is similar to many other Philippines species in that it has emerald green, lanceolate, glabrous foliage with 3 tri-ply parallel veins, good fast growth habit that quickly fills a 5 or 6 inch basket and seems to be a very good bloomer.

It formed 2 peduncles during its first year as a rooted cutting but the flowers failed to mature and all fell off. I expected it to be at least another year before I saw any flowers but was surprised when only 3 months later it started budding up again. This was just last summer! It proceeded to put on 4 more peduncles and together with the first 2, all bloomed, not just once but 3 times during last summer and fall. The flowers are rather small and cup shaped (much like *H. campanulata*), and are a gorgeous pink with pomegranate red corona.



Hoya siariae Kloppenburg



Photo Gallery Descriptions

Top Row Left to Right

H. densifolia Turczaninow: This species has been around since 1848 and is a gorgeous relative from Java of the Philippine species *H. cumingiana* discovered in 1844. The foliage is similar to but with much larger leaves and spaced closer together. The flowers are also larger and it is a better bloomer. The stems are heavier and much sturdier than *H. cumingiana*. My opinion is that it is a clone that was either carried by natives to a new home and naturalized there or perhaps from seed. Who knows how almost identical species grow such a long distance from each other! It likes lots of very bright light to bloom, even some early morning sun, good air movement and should never be allowed to dry out completely. (Photo by Ann Wayman)

H. clemensiorum Green: The foliage of this species is without a doubt the most awesome of all the hoya species. The medium green leaves can reach 12" long. The darker green to purple veins are pinnate with each vein raised from the surface of the leaf leaving a flat depression in between with loops and whirls. This species is said to be in the *H. finlaysonii* complex and judging from the appearance of the flowers they may be, however the flowers on this species can last up to 6 days in perfect condition, whereby the *H. finlaysonii* complex flowers usually last no more than 24 to 48 hours. I like to keep this species barely moist, give it lots of indirect light and a weekly light feeding of a good balanced fertilizer during the summer months and it will bloom nine months out of the year. (Photo by Ann Wayman)

Center Row Left to Right

H. cv. Joy: This is one of the beautiful new hybrids, a cross between the species I know as *H. fuscomarginata* and a clone in the *H. vericillata* complex (*H. sp.* from Laos). When I first received this cutting it had the name *H. metalica* on it and that was a perfect description. In my greenhouse at night with no other lights on but a flashlight a thousand silver flecks become visible on the leaves...like each leaf was shot with tiny flecks of silver. As pretty as the leaves are the flowers are absolutely gorgeous, and YES they are that beautiful dark lilac color that shows up in the photo. This plant bloomed for me at about 18 months from a cutting and seems to bloom now at about 6 month intervals. It does require a lot of light to bloom and should be allowed to dry out a little between watering. (Photo by Ann Wayman)

H. palawanica Kloppenburg: I received a cutting of this plant back in the mid 1990's and have literally seen this species with every label under the sun including *H. bordenii*, *H. benguetensis*, *H. camphorifolia*. Well, you get the picture! This is a markedly different leaf than the others mentioned above but since we don't identify species by the leaves but use them only as a guideline, The identification must come from careful study of the floral parts. I've looked at this thing under a microscope at least a dozen times over the years and have yet to come to any final conclusion as to what it is. I do know what it isn't! Until we can get an absolute agreement on it's identity, it will continue to carry the label of *H. palawanica*, at least in my nursery. (Photo by Ann Wayman)

Bottom Row Left to Right

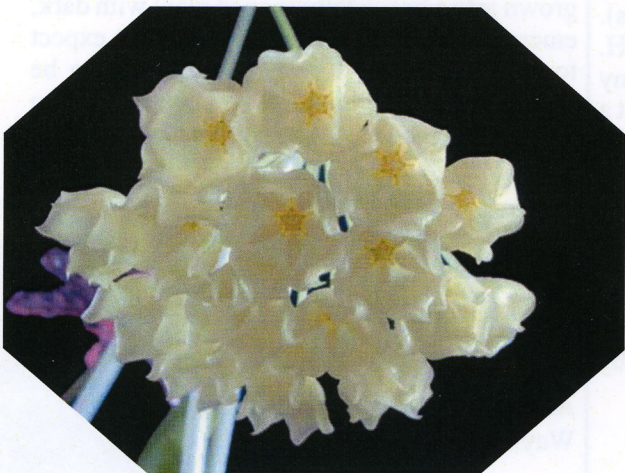
H. blashernaезii Kloppenburg: Another of the beautiful Philippine species that display gorgeous vein patterns. The leaf stems are dark purple and the foliage turns dark maroon in the winter sun. The flowers are rather small, cup shaped and cream to yellow with a dark topaz yellow corona. I have had this plant since the mid 1990's and it has never bloomed for me, however, I sent a small plant of it home with Ann Strahm last summer and within two months received photos of this plant in bloom. (Photo by Ann Strahm)

H. bicolor Kloppenburg: I just received this species last summer but already it has grown into a beautifully shaped plant with dark, emerald green, leathery foliage. I don't expect to see it bloom this year, so will have to be content with Dr. Monina Siar's beautiful photo until I do. (Photo by Monina Siar)

Gallery
Desc. by
Ann
Wayman



HOYA PHOTO GALLERY



ALOHA HOYAS

Specializing in healthy, well grown Hoyas
(as well as a good selection of Dischidia)
Grown in Hawaii

We are certified by the Hawaii Department of Agriculture to ship to all 50 states

See us online at: www.bigislandgrowers.com/AH.htm

Email: carol@bigislandgrowers.com
Phone: (808) 982-6843

Mail: Aloha Hoyas
P.O. Box 1359
Keaau, HI 96749

GREEN: PLANT RESEARCH

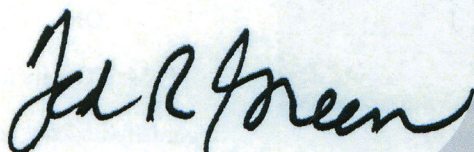
P.O. BOX 597, KAAAWA, HAWAII 96730 U.S.A.
TELEPHONE/FAX (808) 237-8672

EMAIL GREENT010@HAWAII.RR.COM

WEB ADDRESS - WWW.RARE-HOYAS.COM

WE HAVE INTRODUCED OVER 1/3 OF ALL OF THE HOYAS NOW IN THE TRADE, WITH NEW ONES NEARLY EVERY YEAR.

WE NO LONGER PUBLISH A PRINTED CATALOG BUT TAKE A LOOK AT OUR CATALOG ON OUR WEB SITE - IT'S BIGGER, BETTER AND FULL OF COLOR.



Books

Handcrafted Cards



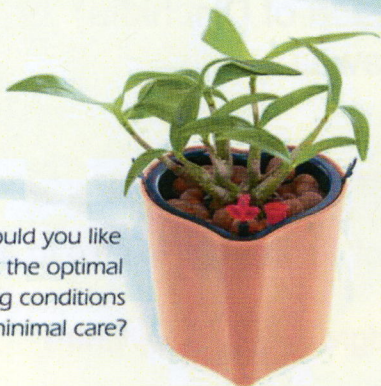
Orca Publishing Co.

Specializing in Hoya Books and Cards
E-Mail: hoyaannie@aol.com

Phone (541) 664-6808

A new way of culture **without soil...**

For the **tropical plant** lover!



How would you like to get the optimal growing conditions with the minimal care?

We have a **simple solution** for busy people: Our way of culture is **hypoallergenic, healthy, clean**, reusable indefinitely and recyclable.

Easy and ecological

- 3.5 in. starter kit. Ideal size for hoyo cuttings!
- Plants use only the quantity of water they need.
- Saves you time on watering and feeding.
- No pests or root sickness related to soil.
- Purifies the air in homes, offices, etc.
- You only add water when the indicator is down, which takes approximately 3 weeks!



Order by mail, by fax or directly on the web site. Sorry, PHONE ORDERS ARE NOT AVAILABLE!
We accept: Visa, Master Card, Amex or International money order (pink slip)

P.O. Box 1038, Mirabel, Qc, J7J 1A1, Canada Made in Quebec, Canada
Tel: 514.906.7908 Fax: 514.906.7809 www.conceptslacault.com



Childhood Bouquets



Natures Delights



Wildflower Fires



Enchantments



In My Garden

Original Art Creations By Dia

(Hand Crafted)

Sets Include 16 Letter Cards Of 4 Enchanting Scenes. 8 1/2" x 11" Scored Letter Cards, Perfect for Easy Computer Printing Or That Special Handwritten Correspondence. Matched Envelopes Included. \$24.95 Per Set Plus Shipping

To Order Call

(541) 474-7937 (541) 664-6808

OR

E-Mail Orders to:

cardsbydia@aol.com

HOT! HOT! HOT!

Nothing like this has ever been attempted before! Dale Kloppenburg's wonderful text in "The World Of Hoyas" has been kept intact, while all the old black and white photocopies of herbarium sheets have been replaced with full page, full color photos of beautifully staged foliage shots with large photo insets of flower umbels that represent the particular species.

Some of the very best photographers in our organization have participated in the publishing of this book with many beautiful photographs, all labeled and correctly identified to the best of our knowledge.

If you have ever wondered what an entire plant, or even the leaves and growth pattern looks like when you see an especially beautiful umbel of hoya flowers, now is your chance. This beautiful book has been professionally bound in perfect binding with a semi-soft vinyl cover. contains 260 pages with several blank pages at the back for notes. Available now. Just \$48.00 for the book plus \$2.85 book

The World Of Hoyas
A Book Of Pictures



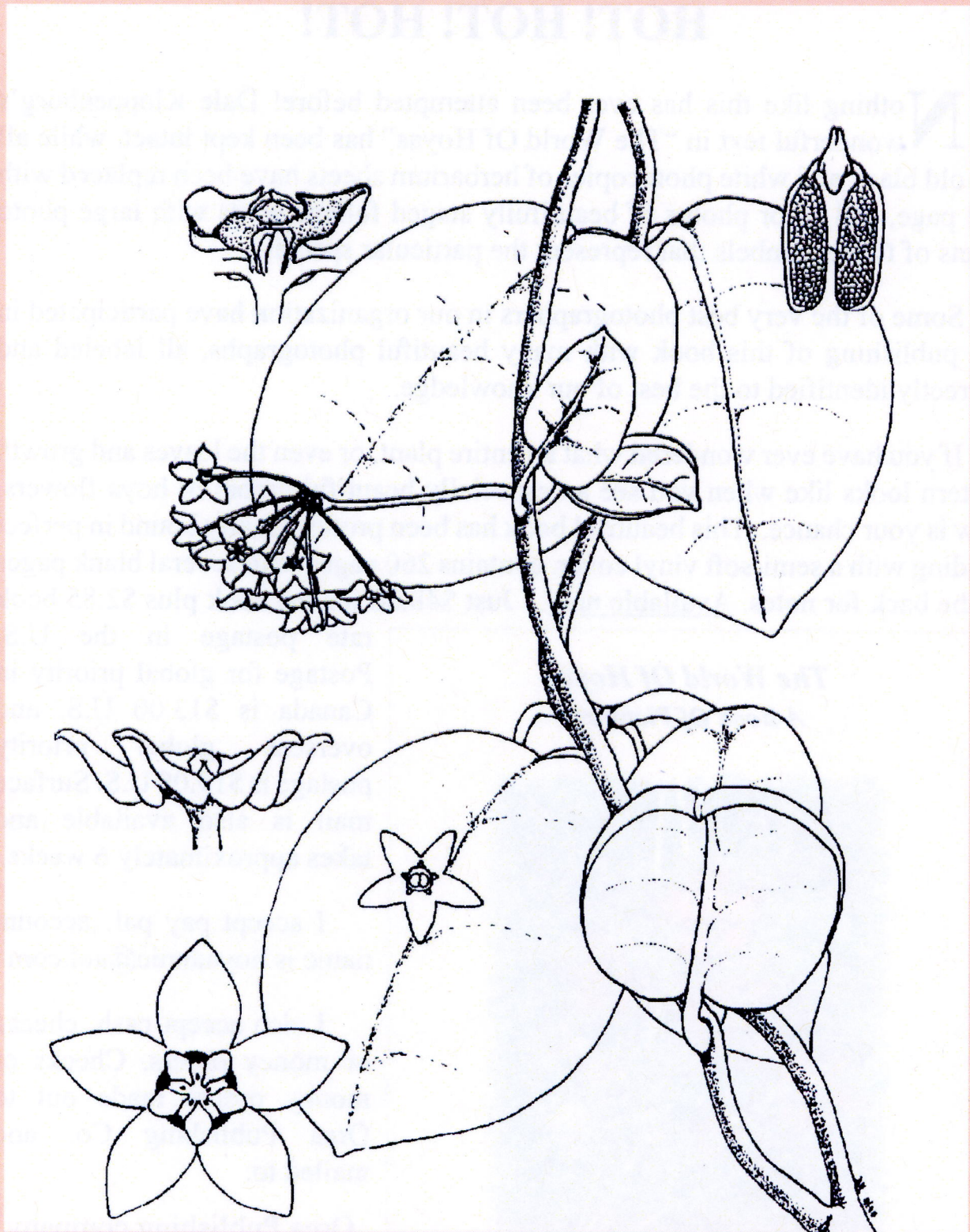
By Dale Kloppenburg with Ann Wayman

rate postage in the U.S. Postage for global priority in Canada is \$13.00 U.S. and overseas global priority postage is \$19.00 U.S. Surface mail is also available and takes approximately 6 weeks.

I accept pay pal,..account name is hoyaannie@aol.com

I also accept cash, checks or money orders. Checks or money orders made out to Orca Publishing Co. and mailed to:

Orca Publishing company
4057 Carlton Avenue
Central Point, OR 97502



Hoya australis ssp. *tenuipes* (K. Hill) P. Forster & D. Liddle, **comb. nov.**