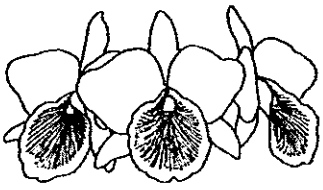
GREATER LAS VEGAS ORCHID SOCIETY



THE ORCHID COLUMN

SUNDAY, FEBRUARY 5, 2006 2 p.m.

Carol Siegel, Newsletter Editor

BECAUSE IT IS SUPERBOWL SUNDAY, THE MEETING WILL START **PROMPTLY AT 2** SO OUR FOOTBALL ENTHUSIASTS CAN HAVE THEIR ORCHIDS AND THEIR FOOTBALL,TOO! BUILDING IS OPEN AT 1.

Part carnival, part rummage sale, our annual **White Elephant Sale** was a huge success, netting us over **$1100**! What fun we had haggling over the classy clutter that others foolishly discarded. To cries of, "But what IS it?" we upped our $2 bids to $3 and delightedly carted out more stuff than we carted in. Thanks to everyone for the enthusiasm and the generosity.

Our January speaker, **Jason Fischer**, was genuinely entertaining and informative, and members had glowing things to say about this charming young man from Orchid Limited Nursery (www.orchidweb.com). His talk on the orchids of Japan introduced us to ***Neofinetia falcata***, an exciting species that he also sold. Some of the orchids in his talk sold for $300,000, and we were relieved when his were no more than $200. He even had some for $25, thank goodness. He was nice enough to donate $250 worth or orchids to our White Elephant Sale, too. Jason will have an article on this species in the spring issue of **ORCHID DIGEST**. If you don't subscribe to this great magazine, we have subscription forms at the meeting, or go online to www.orchiddigest.com. At the end of the newsletter, I have gotten permission from ORCHID DIGEST to publish a former article on this fascinating orchid, which I think you will enjoy. Thanks to Clarice Dean who prepared our Species of the Month sheets on *Neofinetia falcata*, too.

Mike Levin spoiled us with a table full of blooming paphiopedilum which he generously sold for great prices. We thank him for donating two orchids to the raffle.

Thanks to all the members who paid **DUES** for 2006. Everyone who has paid will find a membership card in the envelope with the newsletter. The beautiful membership cards were made expressly for us by the very talented Leslie Doyle. Thanks so much, Leslie. Leslie, by the way, is the editor of the Silver State Gardener, a wonderful publication. For only $3.50 (a bargain!), you can get a year's subscription. Interested? E-mail Leslie Tomatotomato@cox.net or call 658-7585.

Welcome to our new member, Melissa McBurney. Glad to have you!! When she was a guest at our meeting, the Review Journal took her picture and interviewed her. Now a star, she just HAD to join.

A reminder, if you haven't paid, that your dues are due now- $25 for an individual and $40 for a couple. You can pay at the meeting, or you can send a check made out to GLVOS to me: Carol Siegel, 8601 Robinson Ridge Drive, Las Vegas, NV 89117. Don't know if you paid? Look at the label on your newsletter envelope. If it says (05), you haven't paid yet. If it has a (*), it means you were a guest and never paid. If you were a guest and are not going to join, drop me a note (growlove@cox.net) or leave me

message (254-4168) so we don't keep sending you the newsletter.

Three new books on miniature orchids were donated to the library. A magnificent book, **FLORA'S ORCHIDS**, was added to our library in memory of Steve Nogaim, beloved son of Scotty and John Nogaim. Everyone in our club holds Scotty and John in the highest esteem, and we extend, once again, our heartfelt condolences.

We thank Jeri Lee, Carol Spencer, Christine de la Cruz, Alane Olsen, and me for the wonderful food at the meeting. We thank Melissa Knight, Jeannie Salles, Miles Hoffman and Gustavo, and Alana Sullivan in advance for February food. Kind folks have signed up to be "food angels" all the way through May. Looks like we will continue to have "dinner and a show" all year.

FEBRUARY SPEAKER

Speaking of dinner and a show, the "show" for February will be presented by **Mark Dimmitt**, Director of Natural History at the Arizona-Sonora Desert Museum, in Tucson. His subject is especially intriguing- how to grow orchids OUTDOORS in the desert. He calls his talk, "**No Greenhouse-No Problem.**" I visited his home for a Summer Solstice Party while I was in Tucson and there, beneath lush mesquite trees, were orchids growing outdoors in the summer heat! Mark knows EVERYTHING about growing in the desert, and I am certain, from interviewing him for my desert orchid article, that you will enjoy this fascinating man. We are thrilled, too, that **Daniel Vong** will be providing our raffle and selling orchids. How we have missed him!

Following the newsletter, with kind permission of Orchid Digest, is Dr. Harold Koopowitz's very informative article all about orchid roots, as well as the article on *Neofinetia falcata,* and a funny poem by Sue Fordyce. **KEEP BLOOMING Love, Carol**

ALL THE PEOPLE WHO MAKE IT HAPPEN:

CAROL SIEGEL- PRESIDENT
CLARICE DEAN -VICE-PRESIDENT
EILEEN MCKYTON- SECRETARY
DIANA SMITH-TREASURER
AND

Dan Mumau, Michael Lawless, Marsha Hawley - Membership Hospitality Chairmen
Eileen McKyton and Dan Hawley- Welcome Desk
Lillian Patterson- Photographer and Historian
Dan Mumau, Mike Lawless, and Tony Billitere- Raffle Chairmen
Marsha Hawley- Fund Raising Chairlady
Phyllis Bond, Leslie Doyle,Shelly North and Eileen McKyton- Special Events Chairmen
Jeri Lee and Terry Wilsey- Nevada State Garden Club Representative
Alex McKyton -Building Chairmen and Webmaster
Tex Severance and Mike Levin- Show and Tell Gurus
Tex and Gidget Severance- Judging Chairmen
Scotty Nogaim- Election Chairman, Raffle Lady
Terry Wilsey- Club Travel Agent Extraordinaire
Steve Ninemire Library Chairman Clarice Dean, Assistant Librarian
Clarice Dean- Trip Chairman
Shelly North-Classy Club Apparel Chairlady
Daniel Vong-Favorite Member

SPIRANTHES INFERNALIS
FOUND ONLY IN NEVADA

COMING ATTRACTIONS

Our meetings are held at the Nevada Garden Club Building at Twin Lakes and Washington between Valley View and Rancho at the western edge of Lorenzi Park. The meeting starts at 2, but I open the building at 1.

February 5, 2006	Mark Dimmitt,"No Greenhouse. No Problem" Growing Orchids Outdoors in the Desert!
March 5, 2006	Doug Conkin, "Integrated Pest Management"
April 2, 2006	John Salventi," Parkside Orchids, "2005 Taiwan International Orchid Show"
May 7, 2006	Harry Phillips, Andy's Orchids, "Tiny Treasures" (the Pleurothallidinae)
June 4, 2006	Jim Comstock "3-D Orchid Photos"
July 9, 2006	Eric Christensen
August 6, 2006	Barbecue in Mt. Charleston
September 10, 2006	Marni Turkel, "How to Grow Orchids"
October 1, 2006	Greenhouse Tour
November 5, 2006	Bill Bergstrom, "The Orchids of Mexico"
December 3, 2006	Seventh Annual Holiday Party
January 7, 2007	Steveve Frowine, "Orchids for Dummies" (the author)

might transfer organic matter into the orchids and might also be a route used to gain inorganic elements. Mycorrhizal fungi appear to be more common in temperate than tropical orchids.✾

Additional Readings

Arditti, J. 1992. *Fundamentals of Orchid Biology*. John Wiley & Sons. 691 pp.

Benzing, D. H. 1990. *Vascular Epiphytes*. Cambridge University Press. 354 pp.

Capon, B. 1990. Botany for Gardeners. Batsford Press. 220 pp.

Porembski, S. and W. Barthlott, 1988. Velamen radicum micromorphometry and classification of the Orchidaceae. *Nordic Journal of Botany* 8: 117-137.

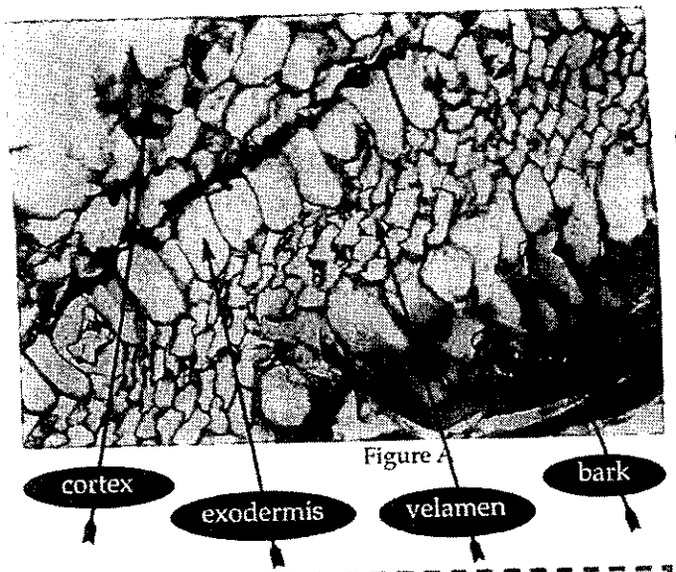
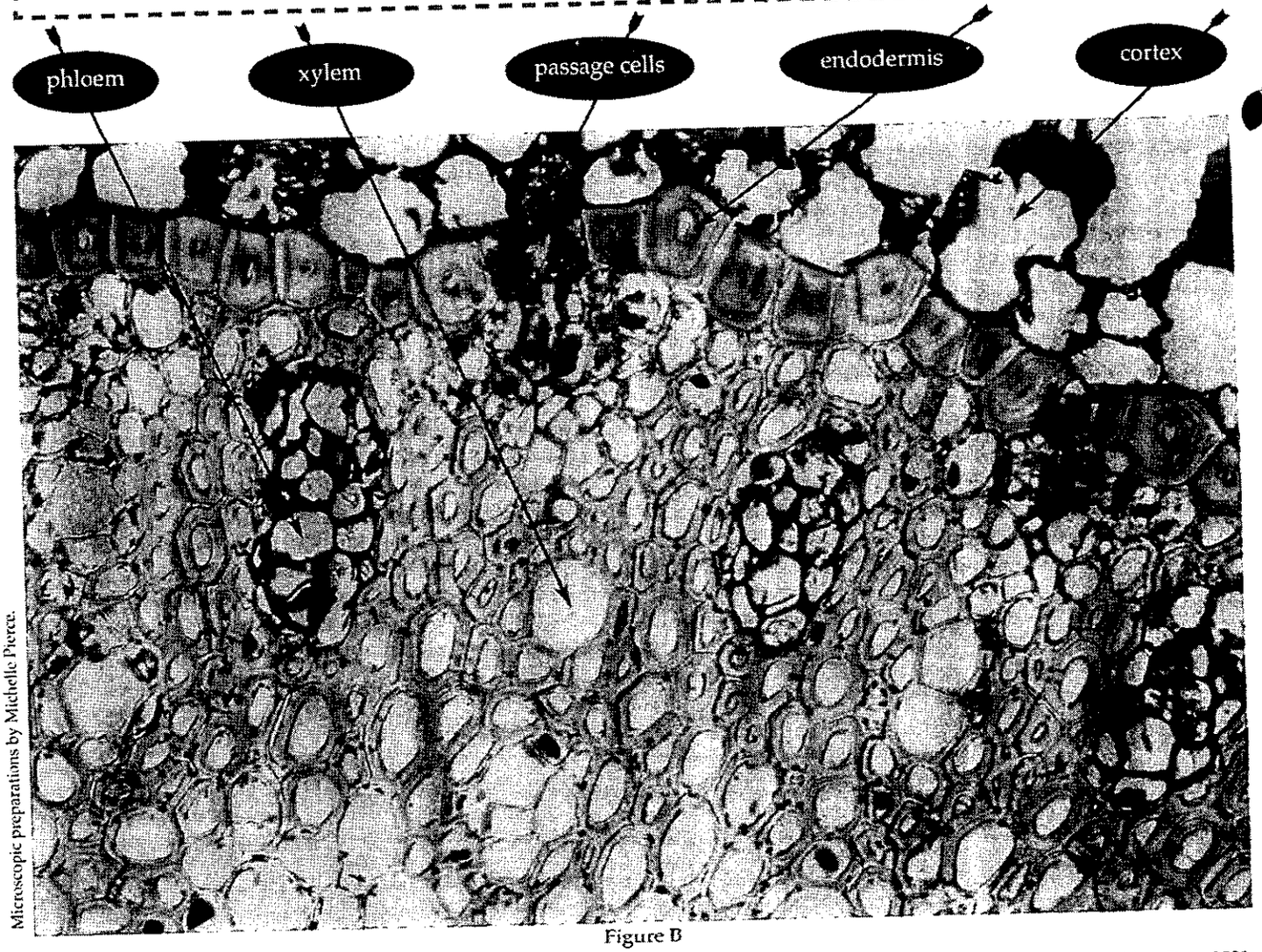


Figure A

Root structure in *Aerangis verdickii*.

This root was cut off a plant attached to a tree in Zimbabwe. Figure A.: Outer portion of the root. Note the large velamen cells adjacent to the tree bark. Figure B.: The phloem cells are used for transporting organic molecules and the xylem for transporting water and inorganic ions. Note the thick walled cells of the endodermis and the passage cells to allow water and other molecules to pass between the cortex and stele.



Microscopic preparations by Michelle Pierce.

Figure B

FUURAN AND FUUKIRAN
DEMYSTIFYING THE ORIGIN OF *NEOFINETIA FALCATA*
Part 1

THOMAS JOSEPH MULHOLLAN, M.D.

History of the Fuuran and Fuukiran (*Neofinetia falcata*)

MANY OF US IN THE WESTERN WORLD are familiar with the intrigue, beauty, wealth of knowledge and mystery surrounding both ancient and modern Japanese culture, but very few westerners actually have in-depth knowledge about Japan. Reasons for this probably include the language barrier (both written and spoken) inhibiting the fluid transfer of information, geographical isolation, and basic human frailty resulting is the mistrust of the unfamiliar. Even so, Japan has a great wealth of knowledge, including a fascinating store of previously unknown information about orchids. For example: the entire plant—not only the flower—is of great value to the Japanese; orchid culture was established well before the 1800s in that country; and the way in which the orchid is presented determines whether or not it will receive superior (garden name) status.

The Japanese were likely not the first to identify *Neofinetia falcata*. The earliest records of this species in Japanese history probably came from the Chinese book of *Senkaku Ruisho* (published before 1600) and *Kashi Sahen* (published in 1617). Within these texts, *Neofinetia falcata* was called *Keiran Ichimei Fuuran*. *Ichimei* translates as "one name" and suggests that the two names were used to represent the wild form of *Neofinetia falcata*, of which *Fuuran* is now the more commonly used term. The earliest culture information is found in the *Kadan Komoku*, written in 1665, which confirms cultivation of this orchid since the Kanbun period (1661-1673) of the Edo era. This text includes discussion of general culture methods for many different types of plants. While the Fuuran is mentioned, there are no references about the different forms under cultivation today.

During the 1800s, many European orchid enthusiasts were frantically acquiring newly discovered genera from all parts of the world. Since little or no knowledge about their cultivation existed, most of these orchids died. The Japanese, meanwhile, had by then studied and cultivated the Fuuran for over 100 years; they discovered that the Fuuran, or wild type *Neofinetia falcata*, could be found growing in many different parts of Japan. Careful searching demonstrated unique populations of plants that exhibited distinct and reproducible leaf, flower, stem and/or root differences some of which are now assigned a garden name. Japanese horticulturists also determined that the Fuuran is not the only native orchid (or plant) to have these diverse characteristics. *Dendrobium moniliforme* and *Cymbidium goeringii* also demonstrated reproducible variation within each species. The Japanese developed a horticultural terminology to reflect these differences. Today, these categories are still in wide use in Japanese horticulture, and are helpful to know if desiring to purchase one of these orchids (see Table 1).

Genus/Species	Common Name	Garden Name
Neofinetia falcata	Fuuran	Fuukiran
Dendrobium moniliforme	Sekkoku	Chouseiran
Cymbidium goeringii	Shunran	Nihon Shunran

Table 1. Currently accepted botanical name, Japanese "common" name and "uncommon" name (garden name) for three native orchid species.

The Japanese discovered a strong geographical association between the uncommon Fuurans (since designated Fuukirans) and its many islands. Japan is composed of eight Regions; a region is not an official administrative unit, but has been traditionally used as the regional division of Japan in education of geography at schools. These Regions, in turn, are divided into 47 Prefectures; in the Japanese system, the word prefecture is used for translating references to an administrative district, which is about the size of a county. Fortunately, the origin of many of the Fuukirans is known and can be tabulated and/or mapped. Table 2 lists a small number of Fuukirans and their originating Prefecture.

Although these data are preliminary, it is clear that Fuukiran in Japan range from the Northern to the Southern regions. Most of the Fuukiran originated from harvesting the mountainsides in these Prefectures, similar to collecting techniques used by modern orchid collectors. From Table 2, 12 of 47 Prefectures (or 25.5%), are known to contain distinct Fuukiran, and those 12 Prefectures contain a total of 27 Fuukiran. The illustration on page 130 graphically displays the number of Fuukiran in each Region.

According to the Japanese Fuukiran Society (JFS), the discovery of a new Fuuran does not always result in the immediate designation of a new Fuukiran. Several generations of the prospective new Fuukiran clones must be cultivated. This is required so that the JFS can determine if the candidate Fuukiran is truly

Japanese Region	Number of Prefectures in each Region	Number of Prefectures in known Fuukiran	Total Number of Fuukiran in the Region
Tohoku Region	6	1	6
Chubu Region	9	2	3
Chugoku Region	5	2	2
Hokkaido Region	1	0	0
Kanto Region	7	0	0
Kinki Region	7	3	5
Kyushu-Okinawa Region	8	2	2
Shikoku Region	4	2	9
Total	**47**	**12**	**27**

Table 2. Regions and Prefectures as site of origin of Fuukiran, including the total number of Fuukiran in each Regions.

distinct, maintains the uniquely identifiable characteristics, passes those characteristics onto its offspring and, eventually, is deserving of the status of Fuukiran. It is not enough, however, for the plant to have different vegetative or reproductive traits—it must also have cultural characteristics that are pleasing and suitable for a Fuukiran. In other words, the plants must be grown in suitably beautiful pots with artistically sculpted moss. This last point is so important that that some Fuukiran candidates have been denied Fuukiran status simply due to a deviation from the expected presentation, such as an inelegant pot, poorly sculpted moss, etc. If the Fuukiran candidate passes the rigid evaluation process, then the lowly Fuuran is assigned a "Registration Judgment" and a new Fuukiran is formally documented in the Fuukiran manifest.

The origins of the Fuukiran have been traced back to the Edo Period in Japan (1603-1868), at about the time of the Bunka-Bunsei epoch (late 18th century to early 19th century). At that time in Japanese history, the discovery of unusual horticulture varieties or forms was "all the rage" and many Japanese horticulturists spent years identifying and cataloging the myriad varieties and forms. Today, their efforts are recognizable in the large numbers of unusual grasses and trees. The Fuuran *Neofinetia falcata* was not exempt from this practice. As a consequence of this flurry of interest during the Edo Period, some of the collectors of harvested Fuurans with unusual characteristics demanded high prices for their plants. Occasionally, a particularly stunning example of an unusual Fuuran would sell for the same price as an entire home with a garden!

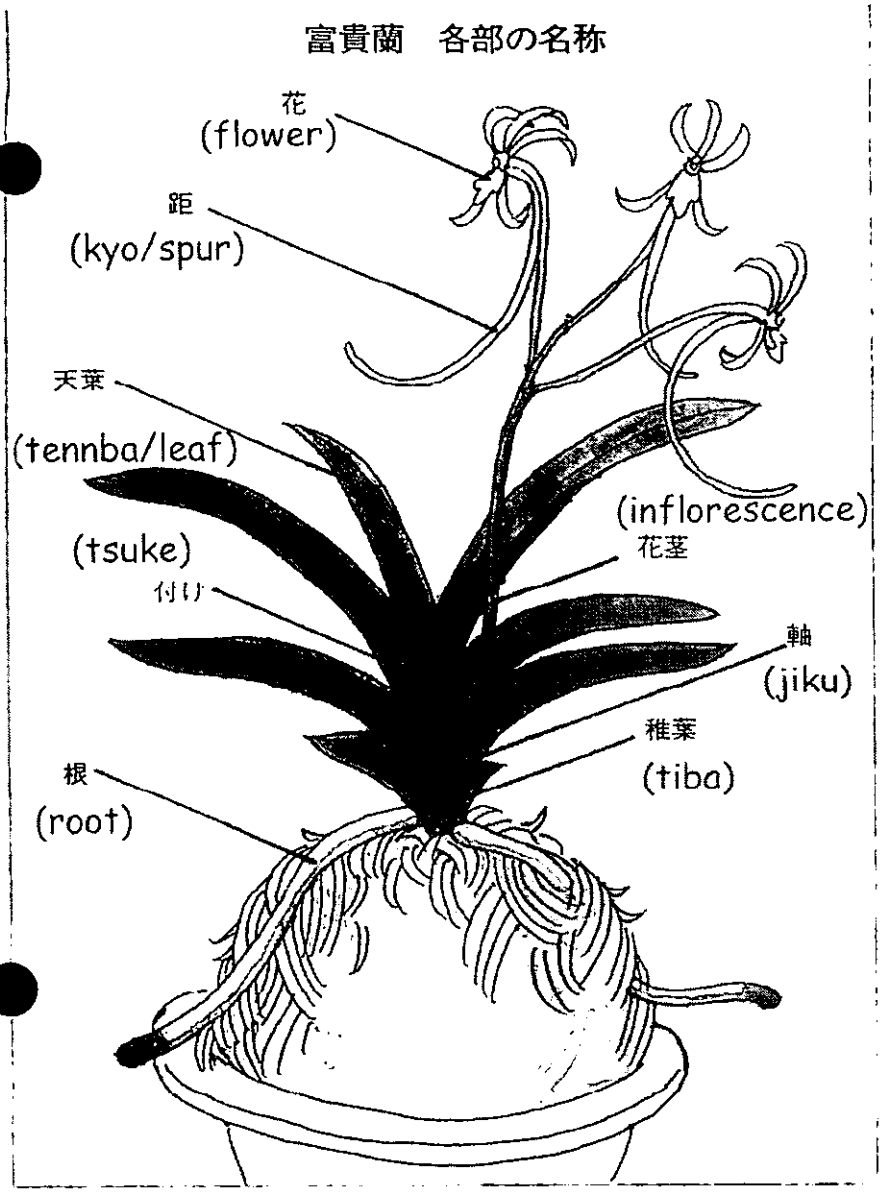
Also during this period, the Shogun Tokugawa Ienari was a very compassionate collector and grower of the unusual Fuurans. He placed great importance upon these small green plants, and went so far as to cover his valuable Fuurans with gold or silver netting to protect them. Admirers who came to see his orchids were required to wear paper masks, so as not to breathe on his prized plants. The regional warlords wished to please the Shogun and commanded their clan members to scour the countryside for unusual Fuurans. It is from this time in Japanese history that the term Fuukiran came into being. Literally, this word means "The Orchid (admired by those with) Wealth and Rank". Today, the translation is shortened to "Wealth and Rank Orchid". Popularity for the Fuukiran decreased at the end of the Edo Period, only to be renewed after the Meiji Restoration, about 1868.

The Meiji government embraced many of the beliefs held by Western civilization, and orchid growing was no exception. Unfortunately, this meant that most Fuuran and Fuukiran were ignored or forgotten, replaced by a new and growing interest in those orchids coveted by the Western world. Fortunately, lists of Fuukiran still existed, but popularity remained modest at best, and little if any advances in availability, culture or discovery of new varieties occurred.

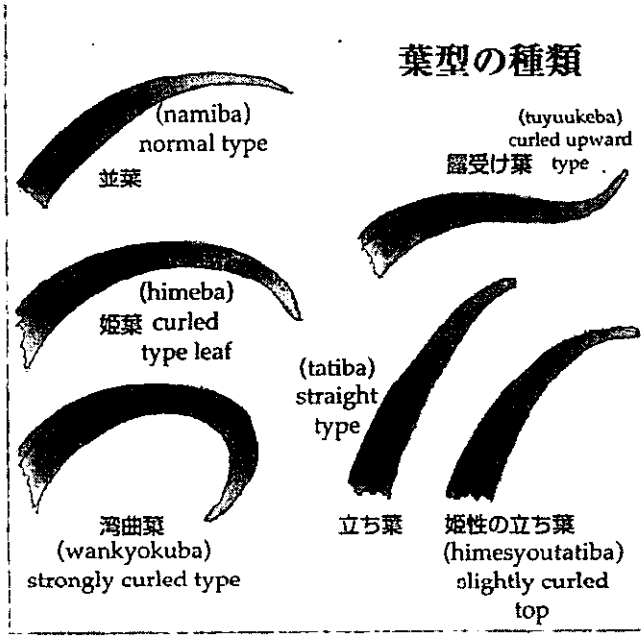
At the beginning of the Showa Period (the 1920s), a second wave of popularity for the Fuuran and Fuukiran began. Books on Fuukiran, as well as societies devoted to the classification, culture and harvesting of Fuukiran, emerged in earnest. Regrettably, most of the Fuukiran were available to—or could be afforded by—the upper classes. This, plus the effects of World War II in the Pacific, led to a severe decline in the Fuukiran's popularity. Several decades after the war, however, the popularity of the Fuukiran began to once again gain momentum. The most dramatic change in recent years is the increased availability of most of the Fuukiran for both Japanese and non-Japanese orchid growers. Today, Fuukiran are no longer enjoyed by just the select few, as seen during the times of the Shogun.

Plant and Flowers of *Neofinetia falcata*

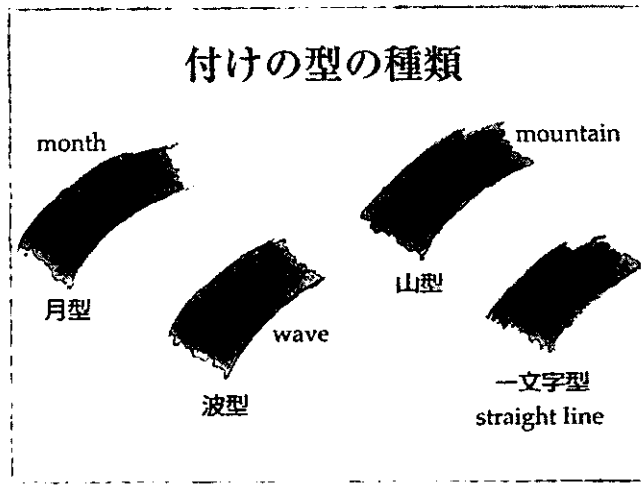
To the Japanese, beauty is found in all the variations in the typical form of *Neofinetia falcata*. This appreciation extends not only to the flower, but to other plant parts, including the stem (*jiku*), flower stalk, nectary (*kyo*), leaves (*tennba*), junction between leaves and stem (*tsuke*), roots and even root tips! The Japanese created an elaborate classification system to explain and catalog all of these differing characteristics. The designation of Fuukiran is a celebration of those plants that are unique and distinct from the common plant, or Fuuran, of this species. The Fuukiran plants are highly desired and have been sought after for over 350 years of Japan's rich and colorful history. The drawing on page 131 is a typical *Neofinetia falcata* orchid exhibiting a vandaceous growth habit, upright inflorescence with three flowers, each with an anteriorly curved nectary. The leaves have a graceful curved configuration and are sickle shaped (hence the name falcata, which means sickle). The plant is grown in a moss bed piled



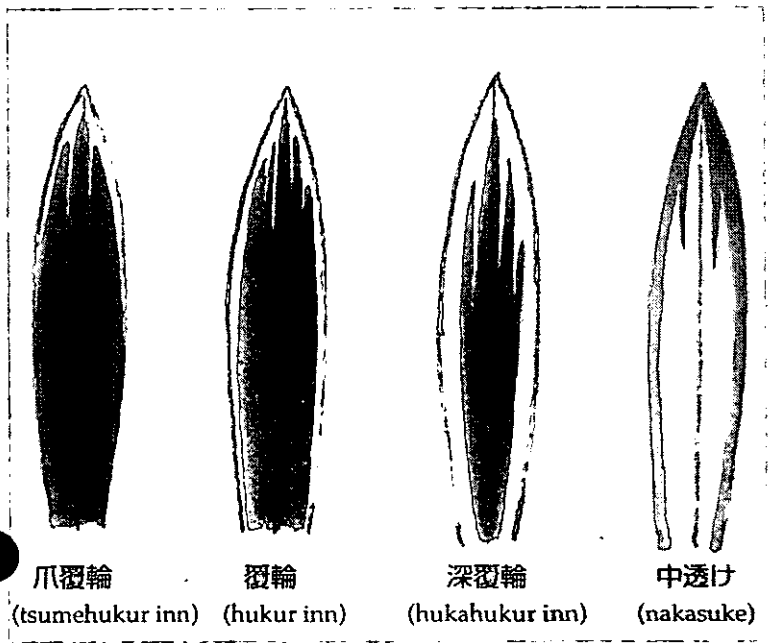
Plant and flower components are identified in this Japanese drawing



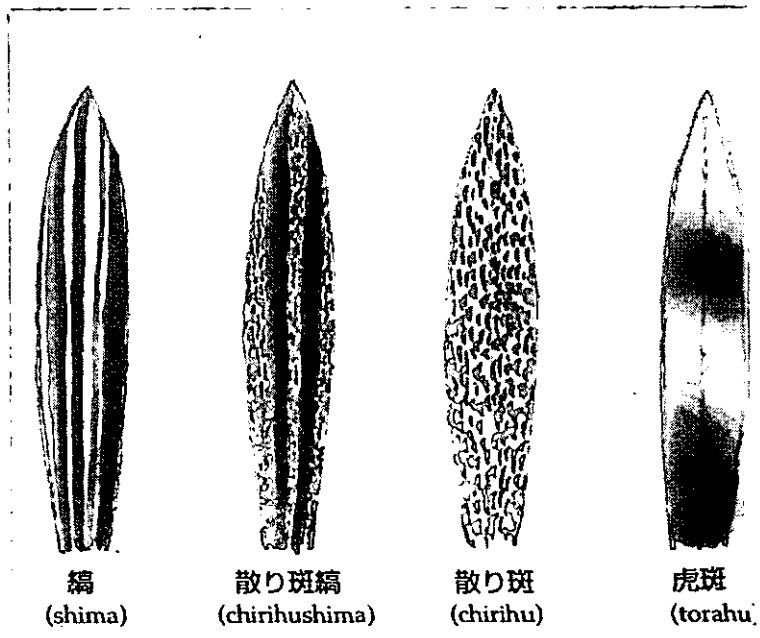
Leaf curvatures of *Neofinetia falcata*



Leaf attachment types of *Neofinetia falcata*



Leaf variegation (type 1) of *Neofinetia falcata*



Leaf variegation (type 2) of *Neofinetia falcata*

honey. Many growers of *Neofinetia falcata* are amazed at the ability of a single plant to fill an entire room with its enticing aroma. Even Western orchid literature has appropriately described the wonderful aroma of the *Neofinetia falcata* orchid, and its scent is sometimes cited as an added positive quality in award descriptions of the American Orchid Society *Awards Quarterly* magazine. Plants of this species are pollinated by a nocturnal moth, and the aroma is strongest after dusk and predawn. In my experience, even the unusual flower shapes still retain this basic characteristic. (In fact, *Shunkyuuden* of the multiple system is even more fragrant than some of the typical Fuukiran flowers.)

Leaves: Shape & Variegation

Leaf characteristics are considered to be very important, and can be divided into two basic groups: *shape* and *variegation*. Some shapes are more common than others, and it is not surprising to see both unusual shape and variegation patterns displayed on a prized Fuukiran plant. While some Western growers have expressed concern that the variegation patterns are consistent with viral expression, no scientific data confirm this hypothesis to date. In Japanese literature, a viral etiology is not invoked as an explanation for the wonderful variegations seen in a select few Fuukiran plants.

Leaf Shape - Curvatures: Leaves of Fuuran range from relatively straight (or slightly curved) to strongly curled. See page 131.

a) *Namiba* - This is the usual type leaf most Western growers have encountered and is very common in the wild form of *Neofinetia falcata*. Many Fuukirans also have this leaf characteristic. In general the end of the leaf is minimally curved downward.
b) *Himeba* - This is a relatively common leaf, and is the curled type leaf. The end of the leaf is more strongly curled downward than the *namiba* leaf.
c) *Wankyokuba* - This is the strongly curled type leaf, which is not very common. The end of the leaf is directed downward resulting in an arcuate configuration.
d) *Tuyyukeba* - The opposite of the *himeba* leaf is the *tuyyukeba* leaf which is curled upward. Upon careful examination, the leaf is curved downward proximally and upward distally resulting in a bi-arcuate configuration.
e) *Himesyoutatiba* - This leave is strongly acute to the vertical axis with a slightly curled tip. The leaf has a sharp downward distal end consistent with a minimally falcate configuration.
f) *Tatiba* - This is a straight type leaf which is also strongly acute to the vertical axis. This leaf lacks all but the slightest curve at its distal tip.

Leaf Shape - Other: In addition to the general curvature of the leaves, other changes can be identified and cataloged. See page 131.

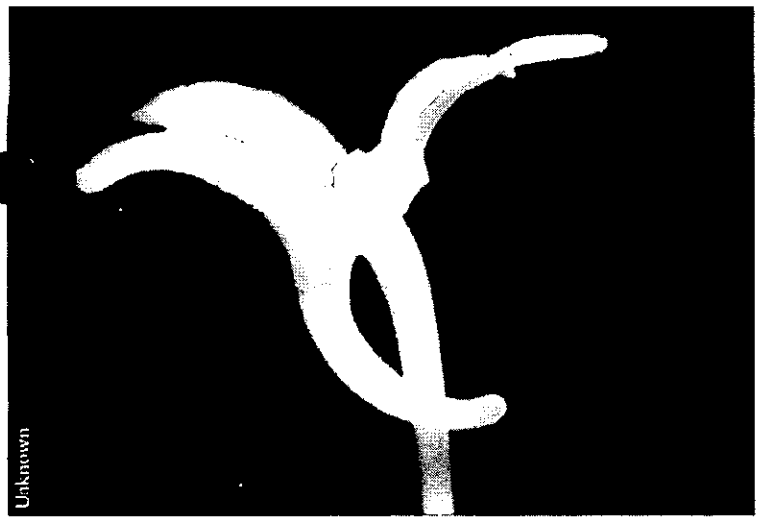
a. *Hariba* - The leaf is thin and straight (linear) without twisting or curling. This is very common for both Fuukiran and Furan.
b. *Kuruiba* - The leaf is twisted about its long axis for about 180 degrees, where the underside of the leaf is now facing upward. This is not too uncommon.
c. *Noshiba* - This linear leaf is curved forming a cylindrical configuration usually maintained in the middle of the leaf, and is referred as "pipe shaped".
d. *Kouryuba* - This linear leaf has a strong expansion of the tissues is the mid portion resulting is a swelled center.
e. *Mameba* - The leaf is short and rounded to oval. Many of these *Neofinetia falcata* plants will have heaven direction flowers.
f. *Kujyakumaru* or *Rasyaji* - These leaves have a rough surface in which the grain of the pattern is parallel to the lateral margins of the leaf.
g. *Kinginrasya* - These leaves also have a rough surface in which the roughed surface is stippled in no specific pattern.
h. *Yasuri* - This leaf pattern is categorized by a rasp surface. The rough surface originates from the midline of the leaf and radiates perpendicularly to the leaf margin, like a file. The English translation of *yasuri* is file.

Leaf Variegation - Usual Forms (Type 1): The ability of Fuukirans to exhibit a unique pattern of leaf variegation is one of the strongest features allowing for the designation of a Fuukiran as opposed to a Fuuran. These patterns range from relatively common to fairly uncommon and are not viral-induced (no convincing literature to date supports a viral etiology). Many Western growers also enjoy the variability in the leaves. Therefore, in general, a variegated Fuukiran may be more expensive than a non-variegated Fuukiran. See page 131.

a. *Tsumehukurinn* - Hypo-pigmentation at the distal tip of the leaf only.
b. *Hukurinn* - Picotee of hypo-pigmentation is identified on the leaf, and is always more pronounced than the small amount of hypo-pigmentation associated with *tsumehukurinn*.
c. *Hukahukurinn* - Same distribution of hypo-pigmentation as *hukurinn*, but thickness of the pigmentation is greater and is best described as a margin of hypo-pigmentation on the leaf.
d. *Nakasuke* - The reverse of *hukahukurinn*, with normal peripheral pigmentation and hypo-pigmentation in the central aspect of the leaf. Very unusual.

Leaf Variegation - Uncommon Forms (Type 2): These patterns are more unusual and are generally more difficult to find and acquire, although the *torahu* form is relatively common. See page 131.

a. *Shima* -Longitudinal stripes of hypo-pigmentation alternate with longitudinal stripes of normal pig-



Neofinetia falcata var. Tamakongu

Neofinetia falcata 'Jade' CHM/AOS.
(Consistent with *Neofinetia falcata* var. Hisui.)

Neofinetia falcata 'Greenbush Fireflies' CHM/AOS.
(Consistent with *Neofinetia falcata* var. Kibana-Fuuran.)

Neofinetia falcata var. Hakuun 'Tom'
HCC/AOS

Neofinetia falcata 'Snowbird' CCM/AOS

Neofinetia falcata var. Gojou Fukurin

mentation. Additionally, the stripes of hypo-pigmentation and normal pigmentation are variable is thickness.

b. *Chirihushima* - The leaf has regularly longitudinal hypo-pigmented and normal pigmented stripes in which the hypo-pigmented stripes are stippled with areas of normal pigmentation.
c. *Chirihu* - The entire leaf is hypo-pigmented and covered by an irregular linear stippling of normal pigmentation.
d. *Torahu* - The leaf has large bands of perpendicular or near perpendicular hypo-pigmentation alternating with equidistant normal pigmentation, called "tiger striping".

Stems of *Neofinetia falcata*

Western growers do not commonly acknowledge or appreciate the Fuukiran's stem, which can be green, brown or black. The junction between the stem and the leaf, (*tsuke*) may have several patterns. See page 131. The most common pattern is a gentle curve between the leaf and stem and is referred to the month type of *tsuke*. The mountain *tsuke* has a gentle curve with a large central bulge, similar in profile to the Yamagata Mountain. The third type of *tsuke* is essentially a straight line between the stem and the leaf. Lastly, the attachment site may be a wavy line and is the wavy *tsuke*.

CULTIVATION OF *NEOFINETIA FALCATA*

Light: Neofinetias prefer medium light levels, from 1500 - 3000 footcandles. If you are growing under fluorescent lights, keep the plants about six - eight inches from the tubes. Under high-intensity lamps, grow approximately four feet from the fixture. This plant can be grown on windowsills, given an east, south, or west exposure. Plants may be grown outdoors in the summer with filtered sunlight.

Temperature: This plant can tolerate a wide range of temperatures. In spring and summer, day temperature should be 70° F or above, with a 10 to 15 degree drop at night. During winter months, day temperatures below 65° F are preferred. *Neofinetia falcata* will tolerate winter temperatures in the upper 30's!

Humidity: should be kept from 40 to 60%. Use humidity trays or a small room humidifier when growing on windowsills.

Water & Fertilizer: Use clean water, such as rainwater, distilled or reverse osmosis water if possible. Flush the plant regularly, especially if using municipal or well water. Never use artificially softened water. Let plants dry out between watering. Use ample water in spring and summer while the plants are in active growth and in flower, reducing quantities during cooler winter days. Use a balanced fertilizer year-round, preferably urea-free. If using rain, distilled, or reverse osmosis water, add some municipal or well water to supply the necessary calcium and magnesium. Fertilize very lightly every other watering during the growing season, once a month during the winter rest period should do.

Flowering: Neofinetias bloom mostly from spring through fall. The inflorescence may have from three to fifteen flowers. Most forms have white flowers with a long nectary (spur). They will last from one to two months, and are extremely fragrant both day and night. There are also pink, green, cherry-red and yellow-colored forms, as well as those with variegated leaves and different growth habits.

Repotting: Preferably done in the spring and early summer, every two to three years. Clay, plastic, or net pots, or wood baskets, will work.

If potting in moss, use a good-quality, long-fibered sphagnum moss, and place the root ball over a small amount of moss. Wrap the root ball securely in sphagnum moss, so that the plant does not wobble. Keep the base of the plant higher than the rim of the pot. Plants can be similarly planted using osmunda fiber.

Possible recipes for potting media are:

A: 3 parts sphagnum, 1 part perlite or #3 sponge rock, 1 part medium tree fern fiber
B: 3 parts fine fir bark, 1 part perlite or #3 sponge rock, 1 part fine tree fern fiber
C: 3 parts fine fir bark, 1 part perlite or #3 sponge rock, 1 part chopped sphagnum

Any of the above mixes can be used, or something similar; these plants are not very particular. You want to have an open mix that will drain freely. Pot as you would most other orchids, keeping the base of the plant above the top of the media.

When growing in a basket, line the basket with a thin layer of sphagnum or coconut fiber to keep the mix from falling through the slats. Plants may also be mounted on cork or tree fern plaques, or on wood branches like oak, sassafras, etc. You can mount the plants with a little sphagnum or osmunda to help keep them moist. If humidity is adequate, some growers plant *Neofinetia falcata* on rocks with live moss.

Guidelines provided courtesy of:
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Roots of *Neofinetia falcata*

A Fuukiran's root is the last feature to deserve some discussion. In fact, the color of the root tip is very characteristic and is a valuable tool in differentiating between the many types of Fuukirans that have similar flowers, leaves and stems. The most desirable root is a ruby root that is uniform in color. Interestingly, the color is almost exactly the same as the ruby slippers worn by Dorothy in *The Wizard of Oz*. Usual root colors include ruby, red, pink, brown, green (sometimes referred to as blue) and yellow. The roots have a proximal and distal region; the distal aspect is called the tip. Evaluation of the root at the junction between the proximal root and the distal tip is important, looking for an abrupt transition (root with two colors), no transition (these roots are only one color) or a blurry transition (so called muddy root in which the root is composed of two colors).

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2. The Neofinetia Web, www.neofinetia.com
3. http://park6.wakwak.com/~chiseko/
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About the Author

When Thomas Mulhollan, began growing orchids in 1991, he found the many varieties of *Neofinetia falcata* especially intriguing, since very little is known about these Samurai orchids from Japan. He is an American Orchid Society probationary judge at the Dallas Judging Center, a member of the Japanese Fuukiran Society and a practicing pathologist in Ardmore, Oklahoma.

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