

The Official publication of The St.Catharines & Area Aquarium Society since 1958

Volume 22 No.6 February 2010

**The**

# **SCAT**

**In This Issue:**

**Crypt Emersion part 8**

**Ten Plants For Beginners**

**Hatching Brine Shrimp Without Shells**

[scaas.info](http://scaas.info)

# Club Notes

**Our Mission Statement:** Meetings of the St. Catharines & Area Aquarium Society are held on the first Monday of each month, 7.30 p.m., at the Seafarers & Teamsters Union Hall, 70 St. Davids Rd. E. Thorold, ON. No meetings are held on Mondays that are holidays. Those meetings are held on the second Monday. There are no meetings during the months of July and August. *The Society, established in 1958, is a non-profit, educational organization dedicated to the task of promoting interest in the breeding, raising, maintenance and study of tropical fish, both at the beginner and advanced levels.* The St. Catharines & Area Aquarium Society is a charter member of the Canadian Association of Aquarium Clubs Inc.(CAOAC) <http://www.caoac.ca> .SCAAS is also a member of the Federation of American Aquarium Societies (FAAS) <http://www.faas.info/> .More news and information about St. Catharines & Area Aquarium Society can be found at <http://www.scaas.info>

**Our next meeting will be held on February 01 at the Seafarers & Teamsters Union hall, 70 St. Davids Rd. E. Thorold. Start time is 7.30 pm ALL ARE WELCOME  
This month's program will be presented by Brian Glassier on Nutrition**

## 2009 – 2010 Executive

President – Ken Brady - - - (905) 935-4716 [kbrady2@cogeco.ca](mailto:kbrady2@cogeco.ca)  
1<sup>st</sup> Vice President – John Verhage – (905) 735-7776 [jverhage@on.aibn.com](mailto:jverhage@on.aibn.com)  
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Secretary – Claudia Carthew - (905) 684-0394 [crarthew@yahoo.com](mailto:crarthew@yahoo.com)  
Treasurer – Wally Ebert - (905) 687-6907 [lebert@cogeco.ca](mailto:lebert@cogeco.ca)  
Past President & Editor DAVE Unruh (905) 684-9860 [dunruh@cogeco.ca](mailto:dunruh@cogeco.ca)

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Aquatic Horticulture Awards DAVE Unruh (905)684-9860  
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Library – Gary Phelps - - - (905) 563-6523  
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Membership & Exchanges – Pat Bridges (905) 735-3352  
Programs – Pam Danyluck - [danyluck@sympatico.ca](mailto:danyluck@sympatico.ca) &  
- Tom Hillier - [tom.hillier@hotmail.com](mailto:tom.hillier@hotmail.com)  
Press/publicity – Ken Brady - - (905) 935-4716 - [kbrady2@cogeco.ca](mailto:kbrady2@cogeco.ca)  
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Membership Dues:  
Family :\$ 25.00  
Single - \$ 20.00  
Junior - \$ 10.00 (under 16)  
Seniors - \$ 10.00 (over 65 )

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Cover photo of a Red Lion Fish (Pterois volitans) Photo © by DAVE Unruh

## Presidents Message February 2010

*The way I see it.*

I hope everyone is taking to heart the fantastic advice from Jerry Draper, our speaker last month and are breeding fish like crazy. It was very interesting to hear his story and how he progressed throughout his life in our hobby. Also I really hope you are getting your fingers into the food prep as demonstrated by Jerry.



Well maybe not that much into making white worm cultures. At least wear gloves. The main point I think is that you need to just take a first step and you will gain knowledge and success. Don't get caught up with the technical details. And don't forget to do your write ups.



**This** month we will have a great time with Brian Glazier. Brian is an out of townner that has been coming to all of our meetings last year and this year and is in fact a member of our club. We have enjoyed his knowledgeable presentations on various topics for many years and this month's topic which will include nutrition will be no exception. Brian speaks always from the standpoint of a hobbyist of experience learning by trial and error and also by dint of a wide circle of successful hobbyist friends.

**The** jar show fish of the month are loaches and sharks. There are a lot of interesting varieties that will qualify. Rainbows, red tail blacks and there must be hundreds of loach types. These are mostly easy to keep and peaceful but fast, good at hiding and quite hard to catch so plan ahead.

**This** is the last month that Les can do the treat-mobile. So we need a volunteer to put their personal touch to our breaks snacks. We have taken some measures to minimize the amount of stuff to carry so it's much easier than it has been in the past.

**We** had a great executive meeting and are investigating purchase of a laptop and also investigating a sound system suitable for auctions. We would appreciate if anyone with ideas on these items would kindly come forward and add to our search.

**We** are getting into our planning for our show next October. We will have a meeting February 8 to discuss just show and auction items and all are welcome. If you can't be there please pass on your ideas. So far we have a place to hold it in our much appreciated regular meeting hall, a show chairman, Judges, Auctioneers, a preliminary equipment list and also an accounting program from Hamilton and District Aquarium Society that we will need to evaluate as an update to the tried and true system Tom Bridges has managed for many years. We still need a PA system and a list of classes so we can recruit sponsors for awards. We also need planning for the layout of the show, food prep, advertising and promotion ideas and number of as yet un-thought of tasks.

**It** will take all types of volunteers to make it a success. Some to work on items we need in the near future some to give us some relief for an hour or 2 the day of the show and auction. Tom Hillier is the show chairman and will be keeping us all informed. He is also the man to talk to about your ideas and what you can do.

**It** is very exciting to put on a show and auction, so don't be shy or you will miss out.

*Ken*

## Executive meeting minutes January 11/2010

### **In attendance:**

Ken Brady

Wally Ebert

Pat Bridges

Tom Bridges

Dave Unruh

Bruce Hallett

Tom Hillier

John Verhage called to say he wouldn't be there due to the nasty weather.

Pam also called to say she wouldn't be there. She was a bit 'under the weather'.

Claudia and Richard were on vacation.

**Pat** suggested that when Claudia isn't going to be able to attend that she gives someone else the key for that date. Tom and Pat had considered not attending due to the weather so there may not have been anyone at the hall to open the door.

**It** was suggested that Santa make an earlier appearance at the December meetings because parents may want children to leave earlier. In order to facilitate the quick start of speakers' programs, it was suggested that

the speakers be asked what equipment they need so that we can be sure we have everything in place.

**Buying** a laptop for SCAAS was discussed. Prices will be checked.

Pricing a PA system was discussed.

According to the revised schedule received by Pam Danyluck in September, the Glaziers will be speaking on nutrition at the February meeting.

**Tom** Hillier gave a progress report on his efforts to organize the SCAAS show and auction.

**There** will be a show/auction meeting on February 9.

**Tom** emphasized that we should support stores that support us (discounts, etc.). Les is unable to continue her help with the refreshment table after the February meeting. So we are looking for someone who is able to pick up some items (donuts, cookies, milk/cream, etc.) for each meeting.

**Pat/Tom** will provide Tom Hillier with the name of the chairman of the CAOAC judges. It was suggested that an apprentice judge be added to the judges lineup for the fall event.

**Meeting adjourned.** *submitted by Pat Bridges*

### **Anagram for February**

*Example:*

*An anagram for this creature is: **alpine alps***

*The creature is: **applesnail***

**An anagram for this plant is: a regally hip hypo romps**

**And the plant is: \_\_\_\_\_**

Answer will be in the next newsletter. **January's answer: Asolene spixe snail**

Fishy Anagrams provided courtesy of



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# SCANNING THE EXCHANGES & etc.

... with Pat and Tom ...



## BAP ACHIEVEMENT AWARDS

presented at the January meeting



**Bob Hayslip**

Pseudotropheus acei ..... 10 pts.

**Tom Hillier**

Nimbochromis venustus..... 5

Congratulations!

Tom Bridges

BAP Chairman

### GOOD READING IN THE S.C.A.A.S. LIBRARY ...

#### ▶ ... in the Hamilton & District Aquarium Society's monthly bulletin

January/2010

- \*Breeding Congo Tetras again by Charles Drew
- \*FAQ about keeping discus by Ricardo Vasquez
- \*Blast From the Past – The Moss Green Tiger Barb by Bill Gottstein

#### ▶ ... in the Nassau County Aquarium Society's newsletter 'Pisces Press' -

February/2010

- \* Culturing Paramecium as a Live Food by Harry W. Faustmann
- \*The Platy and its Care by Unknown
- \*Starting an Aquarium by Unknown
- \*A Mountain Man and his Apistogrammas by Jules Birnbaum
- \*Don't Shoot the Messenger! by Unknown
- \*A Guide to Aquarium Plants by Unknown
- \*Fish Drinking Water – how fish relate to our drinking water by Unknown
- \*Guppy Fish News – Guppy fish harassment and evolution news by Unknown

\*January/2010

- \*Aquarium Ferns Of All Kinds by Unknown
- \*The Importance of Fish Research by Unknown
- \*Assorted Fish News From All Over by Unknown

#### ▶ ... in the Cambridge District Aquarium Society's newsletter 'Aquatic Views' -

December/2009

- \*Whose Salt Shall I Use & Reef Tank by Anthony McAslin
- \*Hatching Veiled Chameleons – Chameleo Calyptatus by Carl & Mari-Anne McCleary



## JAR SHOW RULES AND REGULATIONS

will be on display at the jar show table at each meeting



### Help save the club's printing and mailing costs!

If you are receiving the club newsletter by Canada Post, please try switching to an emailed copy. Thanks! Let Pat know at [tp.bridges@sympatico.ca](mailto:tp.bridges@sympatico.ca)



## UPCOMING EVENTS\ in 2010

**March 14th, 2010** [Hamilton & District Aquarium Society](#). AUCTION ONLY. Waterdown Legion. Waterdown, ON

**March 28th, 2010** [Brant Aquarium Society](#), SHOW & AUCTION. Special Events Bldg., Paris Fairgrounds, Paris, ON

**April 11th, 2010** [Durham Region Aquarium Society](#). SHOW & AUCTION. Aquatic Centre, Ajax, ON

**May 21st – 24th, 2010**

**Canadian Association of Aquarium Clubs 51st ANNUAL CONVENTION**

**At Sheridan College Oakville.**

**More details at [www.caoac.ca](http://www.caoac.ca) click on 2010 convention.**

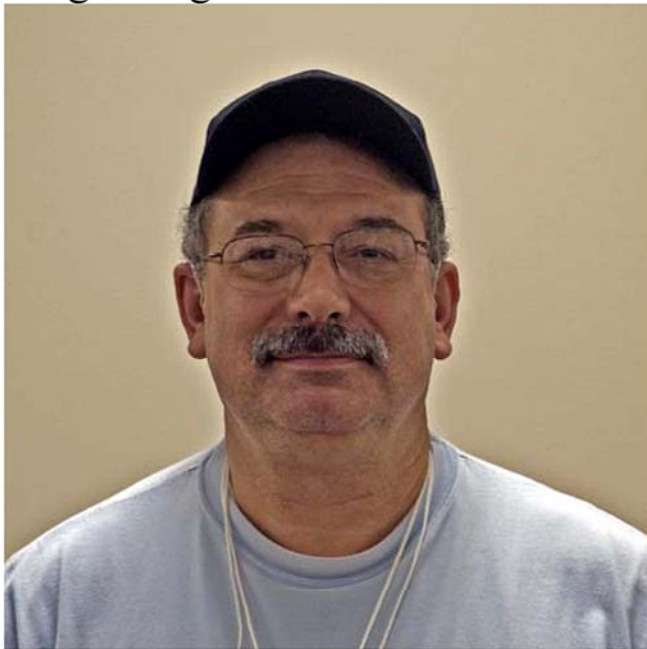
The Exchange newsletters will be in the club library at the meeting.

## Member Profile

*By Pam Danyluck*

This month's member profile is on Kimble Illes, who was born in Hamilton Ontario. He spent his youth on a farm in Fenwick now known as Pelham and his high school years in Welland. For the past twenty years Kimble has resided in St. Catharines with his wife Carol. He has two grown sons, a stepson and stepdaughter.

Kimble works for a grocery chain in Niagara Falls called Metro, previously A&P and has for the past thirty-eight years throughout the Niagara region.



Kimble Illes photo © by DAve Unruh

He became a member of the club roughly five or six years ago, shortly after obtaining his first tank. He

currently has five tanks situated throughout the house, ranging in size from thirty-five gallon down to a fifteen gallon. The five tanks house everything from African Cichlids to Angels, Rainbowfish, Bristlenose Cats etc. He enjoys the Malawi's as they seem to have their own personalities.

For filtration Kimble uses H.O.T. Marineland filters with bio-wheels and aqua-clear power heads with quick filters. Anyone wanting to keep mbunas please let him know as he has plenty of Ice Blue Peacock x O.B. Zebra fry.

Thanks Kimble for letting us get to know you a little better.

## **Wanted**

**M**embers willing to be interviewed for member profiles! It would be a big help if anyone willing to have his or her profile done would contact me. You do not need to be an expert fish

keeper, just interested in fish. 😊

Please contact me at:

[pjdanyluck@sympatico.ca](mailto:pjdanyluck@sympatico.ca) or 905-562-3290.

# The Crypt Emersion – Part Eight (of Ten)

Derek P.S. Tustin



## Week Forty-Four

**Well**, I continue to learn. This past month I continued to experience more and more problems with the rainmaker I had been using. First the glue (Crazy Glue™) that I had used to assemble the spray bars had started to let go in spots, and the entire structure was somewhat unstable. Second, both of the pumps that I had been using to pump the water up into the rainmaker had begun to clog on a regular basis. As I was cleaning them, I realized that the cause of most of the blockages was due to newly born Malaysian trumpet snails (*Melanoides tuberculata*) getting caught in both the pumps and the tubing.

**Finally**, the suction cups and the plastic clips I had used to suspend the entire contraption started to fail. I found it interesting as the plastic in both had seemed to dry out and crack. With all three of these problems, the entire system was no longer functioning properly, so I removed it entirely. I am uncertain if I will need to replace it with another system of raising the humidity (I am considering a commercial fog-maker intended for terrariums), as even with the intermittent functioning of the previous rainmaker, both the *Sagittaria sagitifolia* and the *Anubias hastifolia* have continued to thrive.

**The** disappointment of the failure of the rainmaker was off-set to a large degree because a fellow member of the club provided me with nine celestial pearl danios (aka galaxy rasboras) (*Celestichthys margaritatus*). I have been wanting these small fish since I contemplated setting up this system, and I must admit they fit in perfectly with the tank. As of my writing this, they are all surviving and doing well.



**Celestial Pearl Danio**

**Another** point of interest is that as I was taking the above picture, one of the dwarf Cajun crawfish (*Cambarellus shufeldtii*), emerged. I wondered if the crawfish emerged due to the flash I was using to photograph the celestial pearl danio. Regardless, I very rarely see any of these critters, and due to the infrequency of seeing them am even uncertain of how many are in the tank (I started with six). The one I did see is probably about twice the size it was when I first put it in the tank, and I am grateful at least one of the crawfish has thrived.



**Dwarf Cajun Crawfish**

**The** only other major development has been the emersion from the tank of another *Lobelia cardinalis*. It was completely unexpected, but gratifying. I have been wondering if the emersion has been due to lack of water falling on the surface of the tank from the rainmaker.

## Hatching Brine Shrimp Eggs Without Shrimp Shells

by Dave Unruh, Jan 1991 (updated Jan.2010)

This is a method I have been using for many years. It has 3 advantages:

1. there are no egg cases to separate from the live shrimp
2. the eggs hatch faster
3. the eggs may be fed to fish before they are hatched
4. The brine shrimp embryo needs less energy to break through a hatching membrane than a thick outer shell. This can increase your hatch rate another 10% over un-decapsulated cysts!

### Materials Needed

Brine Shrimp Eggs

Hatchery

brine shrimp net

bleach

vinegar

1 glass container

3 other containers (may be glass or plastic)

### Method

I usually hatch a tsp. of shrimp eggs. The eggs should be presoaked in water for about 1 hour. This softens the egg case so it will dissolve easier. Use the clear glass container (I have used those gas station glasses that you don't know what else to do with). Use about 1 cup of water and aerate with an airstone.

**While** it is soaking, prepare the other containers. In one place 2 parts vinegar to one part water, in the second container fill it 3/4 full of water.

**Back** to the eggs. After an hour add an equal amount of bleach and continue to aerate. You will soon see the eggs change colour from brown to orange. I have found that a bit of scummy foam will form on top and I continue bleaching until most or all of this scum is gone. This takes between 5-10 minutes depending on the quantity of eggs used. At this point one needs to remove the eggs from the bleach solution and neutralize any remaining bleach.

**This** is done by pouring the eggs and bleach through the brine shrimp net into the third container. When the bleach has stopped dripping

through the net place the net containing the eggs in the vinegar solution while keeping the eggs in the net. After about a minute remove the net, let the vinegar drain out and dump the eggs in the second container that has only water in it.

**The** eggs are now ready to be put in your brine shrimp hatchery, which could be any clear container. Use "brackish water"; salty water with a specific gravity reading of 10.10-10.12 on the hydrometer. I have found that marine salt gives better results than pickling salt, although that will work as well. Use an airstone to aerate the eggs and the next day you will have live baby brine shrimp ( \*assuming the eggs were viable).

**To** harvest the shrimp stop the air stone and about 5 minutes later you will be able to see the shrimp swimming. Syphon out with a piece of airline into your brine shrimp net. Catch the salt water and return it to the hatchery. I rinse the live brine shrimp from the net into a small container of fresh water and feed to the fish with a turkey baster. I have been told that the energy content found in unhatched brine shrimp eggs is higher than that of a hatched, live baby brine shrimp.

**Once** you have neutralized the bleach solution you can save the unhatched embryo !

Decapsulated eggs that are not used for hatching right away can be stored for later hatchings or feedings. Drain or remove all excess water from the decapsulated eggs. Add saltwater (300+ ppt or 1.022 salinity) until the cysts are completely covered. The salt water will pull the water out of the eggs (or dehydrate) them again. If the cysts are to be stored for several weeks to a month, replace the old salt water with new saltwater after 24 hours. Store the decapsulated cysts (in saltwater) in the refrigerator for up to one month.

**Your** fish will love you for your extra effort.

\* - I wonder if this could be a good test to see if your brine shrimp eggs are viable. Once the egg shell is dissolved you can see the cyst – they will be orange colored. If the eggs are not viable I wonder if there would be anything inside. If I had some bad eggs I would give this experiment a try. This is the only time I have ever wanted some shrimp eggs that won't hatch!



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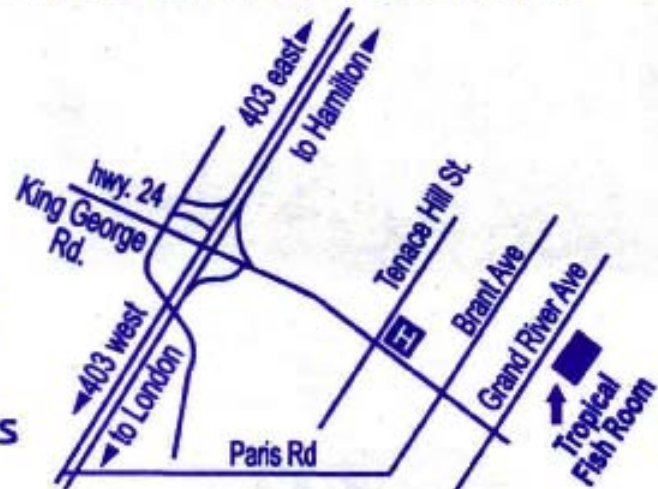
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## **Ten Plants For Beginners**

by Bruce Watts reprinted from The Aquatic Gardener Sept-Oct 1995  
pictures were added by the editor

**This** list of plants was selected on the basis of obtaining consistent results in a low tech setup. There are many species that are that are not on the list. Unfortunately, many aquarium shops do their customers a disservice by having either misidentified plants or non-aquatic species for sale. I suggest a good reference book with colour pictures to help you in identifying the plants on this list.

**Once** you feel confident in identifying any of the species below, pick them up. You will be glad you did.

### **1. JAVA FERN *Microsorium pteropus***



A true fern that is very versatile in the aquarium. This fern will grow in lower light

conditions than most rooted plants. It is easy to propagate and will thrive in a broad range of water conditions. Like its terrestrial cousins, this fern grows from a rhizome. It is best grown attached to a rock or other solid object. The rhizome can be attached to a rock using fishing line, plant weights or rubber bands. The dark roots attach themselves to the rock as the plant grows. The roots can also be pushed into the gravel to anchor the plant. At no time however, can the rhizome be buried or the plant will rot. The rhizome is the part of the plant that is green in colour and grows horizontally. The fronds (leaves) grow up and the roots extend down from the rhizome.

**Be** sure you know what the rhizome looks like and you will have no trouble growing the Java fern. It will even grow floating at the surface.

**Propagation** is very simple. You can cut the growing ends of the rhizome into pieces with two or three leaves. Since this plant can grow in more than one direction, you should be able to take cuttings from at least two sides. Also, small plantlets will grow on the ends of older leaves. These can be cut off and both of the above can be tied onto rocks or pushed into the gravel. Mature plants will produce spores. Growing ferns from spores takes specialized techniques and is not recommended for beginners,

**This** is a marvelous plant that will grow into huge clumps if left undisturbed. It grows in low light situations so it is very good in the breeding tank.

### **2. DWARF ANUBIAS *Anubias nana***

**Like** the Java fern this plant grows from a rhizome, I have found the same growing techniques that work for the Java fern will work for this plant as well. Also, like the Java fern, the rhizome of the dwarf Anubias should never be buried in the gravel.

## *Anubias nana*



**The** dwarf Anubias will grow in low light situations, albeit very slowly. Basically this Anubias is slow growing with dark green egg-shaped leaves. The plant is propagated by dividing the thick stem. Sometimes small plants will be produced and these can be broken off the rhizome and planted. I have had one plant that flowered three times in my display tank. The flowers look like small calla lilies. Unfortunately, a group of emperor tetras decided to eat the flowers.

**The** only problem I have had with this plant is that it sometimes will become coated with algae. All-though this does not seem to bother the plant, it can become unsightly. That aside, this is the perfect foreground plant and I dare you to kill it.

### **3. JAVA MOSS *Vesicularia dubyana***

**This** beautiful green moss is the aquatic gardener's dream plant. It can be grown with no care whatsoever. A clump can be dropped into any tank and will thrive. It sometimes will attach itself to rocks; however it will flourish

even in bare breeding tanks. It will grow in low light and even in unlighted tanks.



**I** use it to control algae by placing clumps on top of rocks or gravel that have become coated with green algae. The clumps can be held down with plant weights or they may float around the tank.

**There** are several other uses for this wonderful moss. It makes an ideal spawning site for plant spawners. The dense cluster provides protection for the eggs and food for the resulting fry. Finally, this moss helps remove impurities from the spawning tank water.

**The** preceding three plants can all be attached to lava rocks with fishing line. The contrast of

colors and shapes makes a unique aquatic display.

**4. GIANT VAL** *Vallisneria gigantea*



**Here** is a large plant with grass-like leaves. A 55 gallon tank is the minimum for this fast growing giant. The main reason I would recommend this species is that it will fill in large areas rather quickly. I have grown this plant to almost seven feet in my 55 gallon display tank. In fact, it grew so fast that I was forced to get rid of it as it kept taking over my tank. Plant it in the back corner of a large tank and place an inside canister filter behind it. The outflow from the filter behind the long undulating leaves will give the impression of a flowing stream.

**Giant Val** is propagated by removing numerous runners. The plant is dioecious, meaning the plants are either male or female.

This plant has flowered in my tank and all the plants turned out to be females. Sexual reproduction in the aquarium is very rare.

**Giant Val** grows well in a tropical tank unlike some of the cooler loving vallisneria species. It is not fussy about water conditions but it needs a deep substrate and good lighting to reach its' potential.

**5. Cryptocoryne balansae**



Yes I am including a member of the *Cryptocoryne* genus as a plant for beginners. Despite the reputation of crypts as being hard to grow, this plant has thrived and reproduced in my tanks. *C. balansae* has grown to 20" in my tanks and is a good plant for the back or sides of the aquarium. It will also look attractive as a specimen plant. The long strap like leaves have numerous indentations. These "blisters" give the plant a distinctive look.

*C. balansae* has produced many runners for me and I estimate that I have harvested over 50 plants in the last five years. The runners seem to pop up all over the tank and should be allowed to grow several leaves before you uproot them. Plants take time to reestablish themselves and should be left undisturbed as much as possible. Provide a deep substrate and good lighting and you should have no trouble growing this lovely crypt.

#### 6. *Rotala Rotala indica (rotundifolia)*

Of the three species of the *Rotala* genus commonly available, this is by far the easiest to grow. *Rotala macrandra* is fragile and may need special lighting. *Rotala wallichii* with its very fine leaves is prone to algae. *R. indica* is a good grower and is undemanding as to water chemistry. The leaves are olive green to pinkish red. The growing ends usually being the reddish colour under good lighting.

When the growing conditions are suitable, numerous side shoots will be produced. To propagate this plant cut 4" to 8" off the tops and from new bunches of three to five stems.

The colour contrast of this plant helps to set off the darker greens in the aquarium. Planted in large groups of staggered heights, this plant makes a nice background plant for the aquatic garden.

#### 7. *Aponogeton undulatus*

"Apon" bulbs are often found in pet shops.

#### *Aponogeton undulatus*



*Aponogeton undulatus*

Many are hybrids and grow very rapidly in the aquarium. *A. undulatus* is not as common as *A. crispus* nor as exotic as the Madagascar lace leaf, *A. madagascariensis*, however it does have a lot to offer the aquatic gardener.

As mentioned above, *Aponogetons* grow from bulbs. The dark brown somewhat shaggy bulbs usually have a few small leaves when purchased. When you plant them, do not plant

too deep and leave the growing end slightly above the gravel line. After planting, stand back because you will be amazed at the phenomenal growth rate of this plant. The large grey-green leaves will reach 16" in no time at all. The leaves have small squares of almost clear tissue. They look similar to those of the lace leaf plant. Unlike the lace leaf, these are not actual holes.

**Propagation** of *A. undulatus* is easy as this plant is viviparous. Instead of the usual "Apon" flower stalks, small plants are produced. These plantlets have a small bulb at their base. Cut the stalk just below the bulb and plant. The only drawback to the genus *Aponogeton* is that the plants will eventually die back and lose all their leaves. When this happens, they must go through a rest period. Dig up your bulb and place it in a cool dark place for a couple of months and you should be able to replant and have renewed growth.

**A.undulatus** is fast growing, has interesting colour and shape and is livebearing. It makes a very good addition to the aquatic garden.

#### **8. WATER SPRITE *Ceratopteris thalictroides***



**Here** is another versatile fern for the aquatic gardener. Watersprite can be planted in the gravel or grown floating at the surface. As a floating plant, the roots hang down in the water and the leaves lie on or extend above the surface. The roots make ideal spawning sites for plant spawning killies. When growing in dense clumps the fronds provide many hiding places for fry.

**Watersprite** is also useful for algae control. As it fills the surface it takes excess nutrients from the water. The resulting growth shades the area below making it doubly hard for algae to grow.

**Small** plantlets will break off from the main plants and begin to grow on their own. You can almost say that propagation is automatic. The only draw back to this plant is that it will die back in winter. Don't worry; small leaves will sprout again when conditions are right. Supposedly, if you leave the aquarium lights on for 12 hours or more, it will keep the plants from going into their winter die back.

**Watersprite** is both very useful and attractive.

#### **9. Amazon Swordplant *Echinodorus bleheri***



No aquatic garden would be complete without at least one species from the genus Echinodorus. E. bleheri is hardy and reproduces easily. The amazon swordplant can grow into huge rosettes and make a beautiful centerpiece in a large aquarium.

**When** buying swordplants, look for specimens with white roots. Any plant with dark roots should be avoided. Also, look out for plants that look brown in the center. This usually means the plant is beginning to rot and new growth will be impaired.

**Once** you have determined that your new plant is healthy, a little care must be taken in planting. I trim any excessively long roots. I then dig a deep enough hole to accommodate the root system. When planting, make sure the crown is level with the gravel. The crown is the white part of the plant where the roots meet the leaf stems. If you plant the crown too deep it will rot. If you are not sure ask a friend for help. Once planted properly, you should have little trouble keeping your swordplant growing and healthy.

**Propagation** of the swordplant is usually simple. It will send out runners and small plants will develop. Healthy plants will also flower in the aquarium. The flower stalks will also produce plantlets which can be detached and planted. The beautiful Amazon swordplant will always be one of the favorites for aquarium culture.

#### **10. HYGRO** *Hygrophila polysperma*

**H. polysperma** is very common in the hobby. There are colour varieties now on the market with exotic names like sunset hygro or scarlet hygro. The original green coloured plant is by far the easiest to grow. With good lighting, the growing tips take on a reddish cast.



Hygrophila polysperma

**Propagation** is by cuttings, which root very easily. This plant can be used as a background. If trimmed regularly it makes a nice display in the front or middle of the aquarium.

**Easy** to grow and propagate and always available, "hygro" is an old stand-by in the aquatic garden.



3770 Montrose Road, Unit 8  
Niagara Falls, Ontario L2H 3K3  
Tel: (905) 354-3555  
Fax: (905) 354-9306  
Email: niagarafalls@summitdirect.com  
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