



NEWSLETTER OF THE HOBBY GREENHOUSE ASSOCIATION

MID - WINTER 2017

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The HGA announces new Round Robin Chair Leadership

Lyndsey Roth has agreed to take over for retiring Round Robin Chairperson Jackie Pendergast. Lyndsey resides with her husband in Lebanon, PA.

Lyndsey Roth is a plant obsessed gardener from Pennsylvania who has been playing in the flower beds since she could walk. She loves orchids, vegetables, and annuals. Over winter her dining room is filled with house plants galore and the basement acts as the starting point for forcing bulbs. For several years Lyndsey has been part of the Round Robins and absolutely loves receiving and sending the letters. Lyndsey can be reached at LRoth06@hotmail.com

Welcome Lyndsey into the leadership roll of the HGA



Lyndsey and husband Jason

HELLO HGA MEMBERS

WEBSITE MEMBER PASSWORD CHANGE

We are on a yearly basis changing the member password in the HGA website. The new password will be Cactus with a capitol C.

What a summer learning experience 2016 was for our flower and vegetable gardens. Mother nature provided a terrible spring for the gardens. I suppose that she was just telling us who really controls things. Many of us had little to no rain and temperatures reaching records almost daily. Then some parts of the country had terrible forest fires destroying everything in its path. Let us hope that 2017 will be a wonderful growing year.

The winter HGA magazine had a article on seed growing that I put together after requests for information along these lines. I did find a nice fact sheet "When To Start From Seed" informational so I have included it in this newsletter. And as a reminder these dates may need adjusted a bit depending on your area of this green earth.

Yes, we do read and answer member email. We strive to provide articles on subjects that you request.

More rabbits, deer and other critters feeding on your gardens this summer? With very dry conditions in many parts of the country this year, grasses went into dormancy, wild shrubs dried up and dropped their leaves. The wildlife simply went looking for a good replacement for their normal food supply. Your gardens which were well kept and watered provided the perfect supply of food for them. If they could talk they would say thank you.

BACK TO THE FUTURE

The HGA magazine will take a look back into our archives to bring you future articles on the subject of "Greenhouse Basics". New and current greenhouse owners can always use a dose of good information in this area. To older greenhouse folks some of the information may seem "well yea of course" but to new owners the information will be a valuable tool to make their greenhouse more enjoyable.

We can always use more articles on greenhouse basics from those older greenhouse managers. Please offer your advice to guide the newbies among our members.

The Winter HGA Magazine included the article on Garden Spot's aeroponic growing system. Follow up articles will include a visit to the AERO company that manufactures these types of systems, and their aeroponic greenhouse complex. It is amazing what a small company can accomplish.

And along those lines we had the wonderful opportunity to spend time at the Steelton-Heighspire High School, PA aquaponics greenhouse complex. I was simply amazed at the complexity of growing fish and using their byproducts to grow vegetable and other plants for sale. Aquaponics is a very complex operation. You will enjoy reading this article in the future, possibly the summer issue. Professor David Foster, M.S. Ph.D. Professor of Biology and Environmental Science, Messiah College, Grantham, PA. provided an in-depth tour of the greenhouse facility.

I would like to invite you to go into the HGA web site and enter into the **members only** site and explore the many areas available to you. And remember the new password is Cactus. The old password was Petunia.

Jimbo, our web site carrier has added HTTPS to our web site listing. This means our members and visitors to our web site now have an added layer of web security.

On the web site: hobbygreenhouse.org you can enjoy the following:

1. The current quarterly newsletter.
2. The HGA Blog has many interesting areas where members have asked questions and received answers from other members. You are welcome to post new questions to the blog.
3. Links to member sites both non-commercial and commercial. This is a good site to see what is going on in this world.
4. Supplier discount list available to members.
5. Link to past magazines and newsletters archive that you can download and print.
6. A quick assess to Membership Questions. This allows for sending email to **Paul Holzwarth** and his "**Questions Asked**" by our members. The site opens to an email already setup for your questions. Just fill in the question and send. Very user friendly.

Look Familiar?

Due to a mixing problem of the 20-20-20 fertilizer and the Dosatron fertilizer injector setting, some plants including these Olympia white begonia grew to twice the height they normally would in the greenhouse. They were of course not saleable. I cut them off with scissors (market packs cut off in the right side flat). With new shoots they looked good in two to three weeks and were sold.



Jay Stanton, PA sent us this picture of his night blooming orchid cactus. Jay took this picture August 28, 2016 at 1:30AM. By 9AM the next morning all blooms were wilted.

WE NEED PICTURES FOR THE BACK COVER OF THE HGA MAGAZINE. IF YOU WOULD LIKE TO SHARE A PICTURE OF YOUR GREENHOUSE OR GROWING AREA IN YOUR HOME SEND US A PICTURE BY EMAIL ATTACHMENT. SEND TO tjghg@verizon.net PLEASE PUT HGA PICTURE IN THE SUBJECT BAR OF YOUR EMAIL. TELL US A LITTLE ABOUT THE PICTURE.

Recycling the HGA Magazines

Those of you that have memberships to receive the printed issue of the HGA Magazine can possibly help obtaining new members by simply leaving your copy of the magazine at the doctor or dentist office for others to read and hopefully become members. There are many other places to leave the magazine to share with other gardeners that do not know the HGA exists. That is of course unless you archive the magazine in your personal library. Thanks.

I continue to be amazed about the number of people that do not know the Hobby Greenhouse Association has been around since back in the 1970's. We do have a good archive of past magazines and newsletters from which we can bring back many good articles for your enjoyment and growing knowledge. Prior to the year 2000 the magazine and newsletter were printed in black and white. Color print and pictures are quite expensive for magazine publications. As a non-profit organization, officers and directors serve with no salary being paid to them. The HGA operates on a tight budget every year to control costs. We serve simply because we enjoy the opportunity to help other folks interested in horticulture. We appreciate your support of the Hobby Greenhouse Association.

Greenhouse “Always Do’s” and “Never Do’s” By Brian E. Coor

Always be careful with pesticides. Read the label, follow directions and wear protective clothing. Keep the phone number for the local poison control center (listed with emergency numbers in the phone book) near the telephone.

Never allow weeds to develop in or around the greenhouse. Weeds act as safe havens for insects and diseases. Prevent weed growth by installing a weed barrier mat in new greenhouses. Control weeds by pulling, hoeing, and as a last resort, with herbicides. Be cautious with herbicides around greenhouses.

Always keep good records. Record what soil mix, fertilizers, and pesticides are used. Record which cultivars grow best. Record dates of bloom.

Never assume your equipment is working properly. Check thermostats to be sure they operate at the proper temperature. Check the fertilizer proportions to be sure they are delivering fertilizer accurately.

Always keep the end of the hose off the floor. The hose end can pick disease organisms from the floor and spread them to plants.

Never allow any compound containing 2,4-D into the greenhouse. This weed killer can cause severe deformities of greenhouse plants. The chemical does not actually have to contact the plant. Vapors are enough to cause the damage. Do not apply 2,4-D anywhere near the greenhouse.

Always control insects and disease before they become a major problem. Monitor carefully using sticky cards and by watching the plants carefully.

Never use creosote or penta (pentachlorophenol) preservatives in or near a greenhouse. Copper naphthenate and Wolman salts are generally safe, although concentrated run-off from treated wood can cause injury.

Always check to be sure a herbicide is safe for greenhouse use before applying. Many herbicides have a long lifespan and can cause injury with their vapors.

Never use pots or flats unless they have been sterilized. Disease organisms can spread on used containers. Also sterilize anything which comes in contact with plants or soil medium - benches, tools, stakes, etc. These materials can be disinfected by soaking for one-half hour in a solution of 1 to 9 parts household chlorine bleach and water. Commercial disinfectants are also available.

Always allow air intake for gas, oil, coal, LP gas, or wood burning heaters. Heaters require one square inch of unrestricted opening for every thousand BTU’s.

Never drop leaves, flowers, or buds onto the floor. This debris will encourage insects and disease. Keep a waste container in each section of the greenhouse and empty it every day.

Always maintain adequate air circulation. Air movement allows leaves to dry, reducing disease development.

Never sprinkle. *Always* irrigate. Do not simply wet the upper surface of the soil when applying water. When plants are watered, whether with plain water or fertilizer solution, apply enough so some runs through the bottom of the pot.

Always test a new soil before planting it. Often poor growth can be traced to improper nutrient availability in the medium. Soil tests are inexpensive insurance. Another soil test should be taken at the first sign of trouble, or better still, once every 1 to 2 weeks.

Never discard plants or dump plant debris near the greenhouse. Insects and diseases from the debris can enter the greenhouse through doors and vents.

Always keep learning. Learn from short courses, newsletters, journals, and occasionally (but not too often) from your own mistakes.

By **Brian E. Coor**, Assist. Professor Ornamental Horticultural and Landscape Design, Virginia Polytechnic Institute, VA

I found this little article in an old booklet and wanted to share it with you. How things have changed and yet remain the same, the editor.

We Didn't Have That Green Thing!

Unknown Author

Checking out at the grocery store, the young cashier suggested to the much older lady that she should bring her own grocery bags because plastic bags are not good for the environment.

The older woman apologized to the young girl and explained, "We didn't have this *green thing* back in my earlier days"

The young clerk responded, "That's our problem today. Your generation did not care enough to save our environment for future generations."

The older lady said that she was right. Then she went on to explain: "Back then, we returned milk bottles and soda bottles to the store. The store sent them back to the plant to be washed and sterilized and refilled, so it could use the same bottles over and over. They really were recycled. But we didn't have the *green thing* back in our day."

Grocery stores bagged our groceries in brown paper bags that we reused for numerous things. Most memorable besides household garbage bags was the use of brown paper bags as book covers for our school books. This was to ensure that public property (the books provided for our use by the school) were not defaced by our scribbles. Then we were able to personalize our books on the brown paper bags. But, too bad, we didn't do the *green thing* back then.

We walked up stairs because we didn't have an escalator in every store and office building. We walked to the grocery store and didn't climb into a car every time we had to go two blocks. We didn't have the *green thing* in our day.

Back then we washed the baby's diapers because we didn't have the throw-away kind. We dried cloths on a cloths line, not the energy-gobbling machine burning up 220 volts of electricity. Wind and solar power really did dry our cloths back in our early days. Children got hand-me-down cloths from their brothers or sisters,

not always brand new clothing. But we didn't have that *green thing* back then.

Back then we worked hard to prepare a meal for the family. We blended and stirred everything by hand because we didn't have electric machines to do everything for us. When we packaged a fragile item to send in the mail, we used wadded up old newspapers to cushion it, not Styrofoam or plastic bubble wrap. Back then, we didn't fire up an engine and burn gasoline just to cut the lawn. We used a push mower that ran on human power. We exercised by working so we didn't need to go to a health club and run on treadmills that operates on electricity. But we didn't have that *green thing* back then.

We drank from a fountain when we were thirsty instead of using a cup or a plastic bottle every time we had a drink of water. We refilled writing pens with ink instead of buying a new pen, and we replaced the razor blade in a razor instead of throwing away the whole razor just because the blade got dull. But we didn't have that *green thing* back then.

We had one electrical outlet in a room, not an entire bank of sockets to power a dozen appliances. And we didn't need a computerized gadget to receive a signal beamed from satellites thousands of miles out in space in order to find the nearest burger joint.

But isn't it sad the current generation laments how wasteful we old folks were just because we didn't have the *green thing* back then.

Perhaps you could share this with another selfish old person, who needs a lesson in conservation from a sassy young sales clerk, who probably couldn't make change without the electric cash register telling them how much to give back.

A Terrible Pest



The Bag Worm

This picture is from my dwarf conifer tree. The bag looking thing hanging from the tree is the terrible bag worm. When they emerge from the bag they are voracious eaters destroying many leaf stems. The bag actually moves when the worm is eating its way out of the bag. Recommend is several sprays of Sevin to kill them before they emerge.

HGA CHAPTERS

The Delaware Valley Chapter of the Hobby Greenhouse Association, Philadelphia, PA Meetings are held on the third Saturday morning of September through June at the Cathedral Village. The chapter has many activities including field trips, a flower show, the raffle plant table, a colorful newsletter and an annual auction, a yearly bus trip and other member activities.

For more information you may contact:

Kathleen Harvey harveyke@yahoo.com

The Central PA. Chapter of the Hobby Greenhouse Association, Camp Hill, PA. Meetings are held on the first Saturday of January, March, May, June, September and November. Like the DVC chapter in Philadelphia, there are many activities for its members also including an annual discount growing supply sale and a spring plant sale from a local greenhouse grower.

For more information you may contact:

June Eckert at tjghg@verizon.net

Everybody has stories to tell about their greenhouses, indoor growing and gardens. Putting into words at times can be a problem. However problems are to be solved. Try writing an article about your experiences. It does not have to be rocket science. We also like pictures as they help tell the story.

TOMATOES AND THEIR STORAGE

This timely tomato information is good to remember all yearlong. No matter the time of the year, either home grown or purchased, do not tuck your tomatoes in the refrigerator. This information was found in the **Produce Grower Magazine, 2016**. It might seem like a good way to store tomatoes, but in reality, the cold temperatures in the refrigerator can wreak havoc on the flavor and texture. While cold temperatures can retard ripening and keep them around longer, refrigeration also breaks down cell membranes inside the fruit, diminishing its flavor and texture.

Researchers from the University of Florida looked at two tomato varieties: heirloom and a more modern tomato. They exposed the tomatoes to 41-degree Fahrenheit temperatures. After one, three, and seven days, the researchers then brought the tomatoes back up to a standard room temperature of 68 degrees Fahrenheit. While the sugar and acid makeup of the tomatoes didn't change, their volatiles, the chemicals that give produce their flavors, dipped sharply. The researchers chalked this up to something called DNA methylation, or the process that essentially switches off a gene in the tomato.

PLEASE CLEAN THAT GREENHOUSE

Now is not the time to put off that chore of cleaning the greenhouse floor and benching areas. And do not forget cleaning and sterilizing the pots and planters you will be reusing this spring. For sterilizing pots and planters recommended is using the inexpensive Clorox and water. A cup of Clorox to a gallon of water will kill off any disease that may be lingering in the debris still contained in or on the pots. Allow them to soak in the solution for at least an hour.

Weeds on the gravel floor and in crevasses around the greenhouse can and will harbor disease and insects. Keep the weeds pulled out and trashed. I would not want to start a war of words about using rock salt on your stone floors to sterilize them and kill off the weeds. However it was a recommendation rather than using weed killer in the greenhouse.

YOUR QUESTIONS ANSWERED

CYBER SPACE CONNECTIONS

Paul HOLZWARTH

Question: If you grow veggies in the winter time what type do you grow and how do you grow them? Are you bothered with bugs in winter growing? Do you grow in a winter greenhouse and or in the home on window sills? We are looking to gain information in this area for our HGA publications to help other members. Thanks for your help.

Tom Eckert tjghg@verizon.net
Pennsylvania

Answer:

On the California Coast, I grown veggies all year in my greenhouse. I rigged up some 10 gallon square, plastic containers to hold potting soil. Tomatoes finally quit so I've switched to small butter lettuce, tea plant, carrots and bell peppers. Greenhouse is unheated and some nights the temp gets into the 30's but they survive. I'm sure this is a much trickier proposition in colder climes.

Bob Lippi
bob@bobtheprinter.com

Answer:

Here are a few bits of information meant to be added to a knowledge base. I wasn't growing veggies as a hobby though. They say a picture is worth a thousand words, but unfortunately, I couldn't find relevant pictures that showed the veggies, the growing medium,.... Among the few pictures I have, I picked two. I provided the link of the product used when available or general information about the product. Since I moved, my business partner kept a copy of all the bills so I can't provide the name of the product unless I remember it!

Tomatoes:
indeterminate type (grows until tip of head is pinched)
pink tomato (DRK 453 - De Ruiter Seeds)
red tomato (Trust)

Growing medium in the nursery
Mixture of 2/3 pro-mix (L1) avec 1/3 vermicompost (L2)
Transplantation (roughly 2 weeks after seedling)
1. The bottom have is sliced out
2. The cup is upside down, the lid is put on.

3. The pro-mix mixture is poured in the cup
4. The tomato plant is planted (??)

Growing medium after transplantation:
coconut coir (27 liters). 3 tomato plants / bed (L5)

Bugs: no specific problem

Diseases:

As the plants grow, they will transpire more hence the need to remove excess humidity. In winter we don't want to vent because we have to heat the incoming air, which is costly.

A disease such as botrytis (L4) can attack the green parts. If the stem is attack there is a possibility that the plant may die. So, in winter, relative humidity must be under control.

Climate control:

When I grew tomatoes in a greenhouse during winter time, adequate temperature control was my biggest concern. The amount of heating oil was checked daily (know were you stand at all times). Every fall a good maintenance of the heating equipment has to be made so that during the winter time, it remains reliable, (to avoid emergency situations especially in the middle of the night!). I had an alarm system connected to my house in case the temperature went too low. I had 30 minutes to react. Knowing the lowest possible temperature it can get outside is important during the dead of winter:--> it will dictate the required power of the heating system (had about 900,000 btu per hour for 9000 square foot)
Keep relative humidity in check

Irrigation:

Irrigation water temperature is equally important. I had to heat the water to about 68F. If the water is too cold, it can restrict growth.

Links:

L1: <http://www.pthorticulture.com/en/products/pro-mix-bx-mycorrhizae/>

L2: <https://en.wikipedia.org/wiki/Vermicompost>

L3: <https://www.dartcontainer.com/products/>

foodservice-catalog/dinnerware-containers/containers/foam/foam-food-containers/#filter=

L4: https://en.wikipedia.org/wiki/Botrytis_cinerea

L5: <http://www.bio-grow.com/en/products/natural>

Pierre M

pierremontminy.qc@gmail.com

Answer:

Lettuce works great for me. Tomatoes, not so much as the whitefly love them!

Kathy Kauffman

kakauffman54@gmail.com

Answer:

Mostly grow plants in garage under grow lights they usually do not need as much water in winter, not to many problems with bugs

Andrew Tannage

mactannage@hotmail.com

Answer:

Here were I live, in the south metro Denver area at the foot of the Rockies (USDA Plant Hardiness Zone 5), not too many home gardeners grow vegetables in the winter, nor is it really possible unless you go to great lengths. We have had an extraordinarily warm fall, so last week I harvested the last of my beets, cabbages, leeks, kohlrabi and broccoli. Still remaining under a double covering of frost blankets are the Swiss chard, a few parsnips and some kale. I also have a cold frame with lettuce that was planted in late summer which we have been enjoying and which will probably last another month unless we make an effort to cover it with heavy blankets. I had also seeded a bed with spinach, which can overwinter here under a cover of leaves. Unfortunately, this year it did not come up. I like doing this with spinach because it is usually the first salad green from the garden in spring and these plants are incredibly hardy. They always seem to survive the cold.

Although I have never done this, some commercial growers here have grown veggies here under high tunnels with some sort of Remay or frost cloth covering directly over the crop. Of course, this only works with cold weather vegetables. Eliot Coleman, a small commercial grower back East, grows cold weather vegetables for market this way. This is more of a winter harvest situation because not much will actually grow in the winter here except in a heated greenhouse. Also, the amount of light out-

doors in the winter is not strong enough for growth in some parts of the country, particularly back East. Coleman has some very helpful books out—Winter Harvest Handbook, The New Organic Grower and Four Season Harvest.

As for a heated greenhouse, well just how astronomically expensive would those veggies be? Would you pay for produce grown in this manner if you really had to pay for all of the fuel to keep the greenhouse warm? Even if we can afford this, should we be consuming fossil fuels for this purpose? I had a friend who had a roughly 10' x 25' heated greenhouse, who was spending about \$1200 a month to heat it when it got really cold here.

Paula Szilard

pszilard@comcast.net

Question:

I just read the HGA newsletter you sent and would like to ask: do you know of any members whose 'greenhouses' are rooms in city apartments, like mine?

There are many problems: grow lights often burn leaves but are needed when the lux level is too low even near sunny windows (as it usually is indoors); temperature control (for healthy dormant periods, etc.); how to move air without creating drafts--and more!

I've been trying to invent the wheel for the last two years and would love to get advice from anyone who has some of the solutions!

Hugo Saurny (New York City)

hugosaurny@gmail.com

Answer:

I grow a lot of plants indoors, some under lights. First, not all need plant be closest to the glass. Put the ones that need the most light in that location. On the lights: Are we talking fluorescents? HID Lights? (The likelihood of burning your plants are greatest with these, since they generate a lot of heat.) High output, compact fluorescents (the skinny, new ones)?

High output, compact fluorescents generate a lot more light the amount of light than the old-fashioned T-12 fluorescents. I now start all my seeds under these because I get much better growth and stronger stems. I also overwinter many of my cacti and succulents under these lights. High output Compact

fluorescent plant lights come in blue and red. Blue light promote vegetative growth and red promotes flowering. You don't say which direction your (greenhouse, sunroom faces. My suggestion would be to go to a grow store and purchase a light meter. In my light meter package there was a pamphlet with a chart that had information on how much light individual plants need. Then proceed accordingly.

Temperature: You are going to have to separate out the plants that require more cold, or a dormant period. Maybe putting them in a cool bedroom near a window would work. My clivias need an 8 week chilling period and I leave mine out until the last possible minute and then bring them into an unheated enclosed porch so that they can continue to chill. If you don't have a place for such plants, you are not going to be able to grow them successfully.

In my sunroom, I have two ceiling fans to move the air. I don't use them much, but they do address the issue of air circulation. The attachment below is information I give when I talk about gardening under lights.

Paula Szilard

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Answer:

While I have a traditional hobby greenhouse (I'm a newbie to greenhouses so don't really know what I am doing yet), I grow plants indoors (tissue cultures and potted plants) in my dining room using wire shelves and the standard shop light units with 7200K fluorescent tubes. The window is facing north plus is shaded most of the day so I don't have your problem. That room does have a heat pump so we get air flow (probably too much). When I had plants in different locations in a previous house, I put small desk fans on each shelf. I varied the distant of the lights from the cultures and plants as needed.

I would also like to hear what others are doing.

Carol Stiff

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Question:

I have a greenhouse with a single wall, corrugated polycarbonate, which, after 5 years has become non-clear, almost frosted-like. How can I clean this type of plastic

Bob Lippi

bob@bobtheprinter.com

Answers:

If just frosted, it may still transmit most of the light. Measure light inside and outside. May not need cleaning.

If green, try Clorox, but mine never totally returned to the original look. Most like it that I see are only good for lettuce or a storage shed.

Tom Karasek

tomsherron@msn.com

Bob, polycarbonate deteriorates with age which means it turns frosted-like.

Bernie Weiner

wiener1@verizon.net

The manufactures recommend a mild soap and warm water solution. Use a soft cotton cloth wiping in the direction of the walls, not across the panels. I have experimented using a soft sponge on a pole like you purchase in the cleaning department of the box stores and it works very well. This method allows for squeezing out the dirty water and re-dipping into a bucket of cleaning solution.

The polycarbonate should be cleaned yearly but we are all too lazy to do that chore.

Tom Eckert

tjghg@verizon.net

The fact that your material is corrugated suggests that it's fiberglass rather than Plexiglas. Fiberglass is generally made from plastics, such as polyester resin, that are strongly affected by solar UV, which causes darkening and opacity. Plexiglas (polycarbonate) is also affected but much more slowly. I used fiberglass in the form of flat sheets on a home-made greenhouse for many years, moving the sheets into the dark in spring and summer which greatly prolonged their life.

Jim Jones

jmsjon664@aol.com

Hello Bob, "Clean" is not the correct word....as in: "how can I clean this type of plastic?" as no doubt your polycarbonate panels are dirty, but, dirty is not your problem. Your problem is something that all plastics: Polycarbonates, composites, resins,

fiber-glass, real glass fibers suspended in a resin, acrylics, super acrylics like luxenes, luxans, luxons, lucitones, clear acrylic varnishes, clear oil-base varnishes (actually they are not plastics, but they suffer the same problem), marine velspars and “polyglass” share problematically: They all degrade from UV (harmful ultraviolet rays from our life-giving Sun). Our skin also degrades from too much exposure to our life-giving Sun (UV).

So Bob, my friend and fellow greenhouse owner and fan of greenhouses, the haze or “frosted-like” on your plastic panels will only get worse with time as the surface of all “organic” (carbon based) substances will oxidize (breakdown, degrade or rust) with the UV present in sunlight.

So What can be done? There are a few things that are worth trying. First of all: Get a very soft window cleaning brush that fits on a pole.....a pole long enough to get to every part of your greenhouse with the soft brush. Wet down the entire greenhouse from your garden hose. In a 3 gallon bucket place about 1 ounce of a mild dishwashing detergent like Ivory liquid...one ounce is about the size of a silver dollar. Fill the bucket about two-thirds full. With the soapy water in the bucket, brush down every external surface of your greenhouse. Rinse with clear water to remove all the soapy water. Allow it to dry to where there are no more droplets of water. Spray the entire external surface with “Armor All “ or “STP sun protectant” and wipe it down with a clean cotton rag. You will experience at least 50% improvement. If the internal surfaces of your greenhouse require the same process, you did not install your panels “this side out”.

You will find, even frosted panels still work to a degree. Next time down the road 10 years, use real glass.

George F. Koerber, DDS
gkoerber@pacbell.net

There is an airplane product designed for cleaning polycarbonate windshields that you might be able to find and use but it sounds as if your glazing is too far gone. Best course is to replace the glazing

Roger Marshall
rmarshall26@cox.net

I tend to use a garden hose end sprayer with dish soap only (Dawn) and then follow up with a long extension pole with a sponge or cloth at the end. These are used for cleaning RV's and house siding. Then comes the rinsing of the soap off with

clear water to uncover the glistening polycarbonate, ready for the cold months ahead and passing all the sunlight possible for the precious plants inside.

Richard Schreiber in Iowa
schreiberra@hotmail.com

Suggest searching Lexan's cleaning instructions on website – sounds very tedious! But using a car polish sounds interesting! – Would never have thought of that.

Barbara Barger
barger@comcast.net

Question:

My greenhouse is a custom 12x16' twinwall polycarbonate greenhouse from BC Greenhouse's Cape Cod line. They're based out of British Columbia and I truly can't say enough great things about the company.

This will be my first winter with a fully functional greenhouse and I'd like to extend my tomato season. Has anyone had luck with bringing fruiting tomato plants into the greenhouse from outdoors and transferring them to containers, or am I better off just starting new plants from seed again? Are there any precautions I could take to ensure that I don't bring in any unwelcome pests from my raised beds?

Erin

Answers:

Check carefully for white flies. We shook ours and checked for remaining flies before putting them in the greenhouse. The year before we were unaware of the White Flies on the plants and the greenhouse was full of them until we sprayed.

Anne Holzwarth
holz58@wmconnect.com

Since most tomatoes can be indeterminate, they may be hacked down good to regrow. The advantages are many. First, you will rid yourself of most pests that may be present. Second, the regrowth will be mature wood so they will flower and fruit immediately. Doing so now also means that the light levels are lower so when they do enter the GH, the adjustment is minimal. I do this now, as my tomatoes from spring are a mess as we have hot humid summers in Tampa Bay. They will now regrow and fruit as the nights cool. Mine are grown outdoors all winter long but fruits begin to ripen in November and continue all

winter unless we get a severe freeze (which can happen but is rare), I would still spray them for pests and diseases once outdoors, and immediately upon enclosure.

Greg Sytch
New Port Richey FL
gsytch@cs.com

Addressing your questions in reverse order. Bringing any plant into the greenhouse world can introduce disease and insect pests into the greenhouse if they are on the plants. Checking the plants for disease and insects is much easier than detecting any soil which may have insects or diseases.

Tomato will grow in the greenhouse but remember to give them the warmth and light they received in your outside garden. If you are bent on trying the transplanting, take a nice size root ball for transplanting. Trim back the plant so there are no long vines on it. This will help reduce the shock of transplanting and the plant will regrow new vines.

Several companies do sell "greenhouse tomato seed" bred for greenhouse growing. From what I have seen they are pretty good but somewhat the size of a patio tomato. The patio tomato and there are several varieties available on the seed market, do make good container growing tomatoes and can easily be moved inside for the cold months since they are already in containers. Size is usually about 3 to 4 inches across.

Hey, give it a try. It will be a good learning curve. Should there develop a pest problem be certain to check any sprays being considered for use that they are ok for edible food products. As always read the labels.

Also possibly take pictures and keep notes. Success or failure the adventure could make for an interesting article for the HGA magazine or newsletter.

Tom Eckert
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With the coming of spring and some having the itch to start seed indoors, let us look at a few pointers for success. Know as much about the seeds you wish to grow as possible.

1. Do the seed require a covering over them of the growing media or seed start mix.
2. Large seed like cucumber and squash (zucchini) can be directly seeded into their growing pots.
3. Some seed, but not many, do not like to be transplanted and may need directly sowed into the growing areas or gardens.
4. For seed mentioned in 3 above, if you want to start them early, use peat pots. When ready, plant the pot into the growing areal. They will breakdown in the soil over winter and add humus to the soil.



5. Should the seed be germinated under lights? Many fine size seed need plenty of light to germination. This is very important for germination of some seed types.
6. If using those nice clear plastic "flat domes" on your propagation trays, remember to remove them during the day time to prevent "cooking" your new seedlings. After the seeds have sprouted, it may be best to not use the flat domes to prevent this problem.
7. Do not over water the seeds or the new seedlings. The seed may well rot and the new seedling could develop damping off disease at the soil line in your growing containers or flats. Damping off disease is the biggest killer of young seedlings. Keep the soil on the dry side.
8. Provide a gently air movement over your new seedlings. There are many benefits including the seedlings growing a stronger stem.

When to Start Various Seeds

Crop	When to start seed	When to plant in garden
Onions	Late January	Third week of March
Leeks	Late January	Third week of March
Cabbage	Late January	Third week of March
Kale	Late January	Third week of March
Pansies	Late January	Third week of March
Parsley	Late March	End of March
Lettuce	Second week of February	Early April
Broccoli	Second week of February	Second week of April
Cauliflower	Second week of February	Second week of April
Tomatoes	End of February	Second week of May
Peppers	End of February	Third week of May
Most warm weather annuals (i.e. petunias, marigolds, ageratum, alyssum (annual), cosmos, snapdragons)	Early March	Second week of May
Eggplant	Mid March	Mid May
Basil	Mid March	Mid May
Impatient, Coleus, Celosia, Cucumbers	Mid March	Mid May
Cucumbers, melons, Squash, Basils	Early April	Mid May

Many herbs can be started in early to mid April for mid May planting. May be good idea to do several seeding's every month to extend the growing herb season with fresh plants.

Please remember this is only a guide and growing conditions may well be earlier or later in your area



My vegetable garden never looked this good! How about yours's?



HOBBY GREENHOUSE ASSOCIATION, INC

January 26, 2017

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