

GROWING DAHLIA SEED

WHEN DAHLIAS ARE GROWN FROM SEED, THE BLOOM IS NOT IDENTICAL TO THE PARENT PLANT. DAHLIAS ARE MADE UP OF MANY SETS OF CHOMOSOMES WHICH ALLOWS THE BLOOM TO HAVE AN ENDLESS POSSIBILITY OF CHARACTIERISTICS. DAHLIAS GROWN FROM SEED ARE HOW HYBRIDIZERS CREATE NEW BEAUTIFUL DAHLIAS.

MATERIALS NEEDED

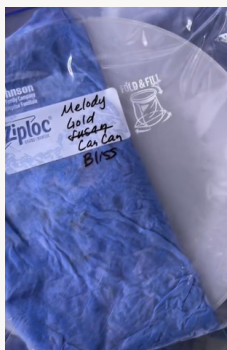
- WARM ENVIRONMENT, ABOUT 65°F
- NATURAL LIGHT OR ARTIFICIAL LIGHT SOURCE
- SHELF
- GROWING MEDIUM (STERILE SEED STARTING SOIL)
- DALHIA SEED
- PLASTIC GALLON SIZE BAG OR CLING WRAP
- BLUE SHOP PAPER TOWELS
- SEED TRAY OR 4" NURSERY POT
- SEED TRAY HIGH DOME
- WATERING CAN

INSTRUCTIONS

A WARM GREENHOUSE OR WARM INDOOR ENVIRONMENT WHERE YOU CAN SET UP A SHELF WITH LED OR FLUORESCENT LIGHTS WILL BE NEEDED TO GROW THE SEED BEFORE THE PLANTS ARE READY FOR OUTDOOR TRANSPLANT. SET UP YOUR GROW SPACE BEFORE YOU BEGIN GERMINATING SEED. GROW LIGHTS WILL NEED TO BE CLOSE TO PLANT MATERIAL TO AVOID TALL WEAK PLANT GROWTH.

ABOUT 4-6 WEEKS PRIOR TO YOUR AREAS LAST FROST DATE, BEGIN GERMINATING YOUR DAHLIA SEED. THOROUGHLY SOAK, THEN WRING OUT ANY EXCESS WATER OUT OF PAPER TOWEL. PLACE DAHLIA SEED ONTO THE PAPER TOWEL. THEN, FOLD THE PAPER TOWEL IN HALF SANDWICHING THE SEED INBETWEEN THE TWO LAYERS OF MOIST PAPER TOWEL. PLACE PAPER TOWEL INTO PLASTIC BAG. MAKE SURE TO LABEL SEED AS YOU GO! YOU CAN PLACE MORE THAN ONE PAPER TOWEL IN THE SAME PLASTIC BAG IF YOU'D LIKE.

SEED CAN TAKE AS LITTLE AS 24 HOURS TO A COUPLE WEEKS TO GERMINATE. AFTER 24-48 HOURS, BEGIN CHECKING YOU PAPER TOWELS DAILY TO FIND SEED THAT HAS GERMINATED.



YOU CAN USE PLASTIC BAGS TO SEAL IN PAPER TOWELS.

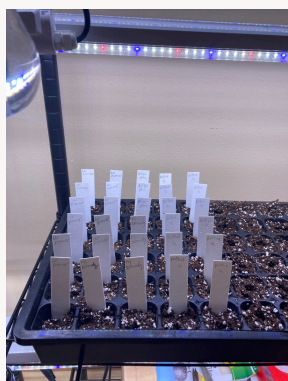


YOU CAN USE SEED TRAYS TO HOLD PAPER TOWELS AND SEAL THE TOP WITH CLING WRAP.

YOU WILL KNOW A SEED HAS GERMINATED WHEN YOU SEE A LITTLE WHITE ROOT STICKING OUT OF THE SEED SHELL. IT IS BEST TO MOVE THIS SEED INTO SOIL AS SOON AS IT GERMINATES TO AVOID THE ROOT WEAVING INTO THE PAPER TOWEL.

*IF THE ROOT HAS ATTACHED TO THE PAPER TOWEL YOU WILL WANT TO VERY CAREFULLY REMOVE IT FROM THE TOWEL. CONSIDER CUTTING THE TOWEL AND PLANTING IT ALONG WITH THE SEED TO AVOID THE ROOT BREAKING.

DURING YOUR DAILY SEED CHECKS YOU WILL CONTINUE TO FIND NEW SEED THAT HAS GERMINATED. GENTLY MOVE SEED INTO A CELL TRAY OR NURSERY POT FILLED WITH STERILE SEED STARTING MIX. THE DAHLIA SEED GOES ROOT DOWN INTO THE SOIL WITH THE TOP JUST BARELY STICKING OUT OF THE SOIL SURFACE. THE SEED IS NOT COMPLETELY UNDERNEATH THE SOIL. SOIL SHOULD BE MOIST. IN A FEW DAYS THE SEEDLING WILL SHED THE SEED SHELL AND GROW COTYLEDONS. UNTIL THE SEEDS HAVE ROOTED WELL AND ESTABLISHED INTO THE SOIL, KEEP THE SEEDS COVERED WITH A DOME.



FRESHLY GERMINATED SEEDS MOVE TO A SEED TRAY WITH A 72 CELL TRAY INSIDE OR 4" POT. SEEDS ARE LABELED BY PLANT PARENT. A CELL TRAY IS NOT NECESSARY. YOU CAN USE A 10X20" TRAY FULL OF SOIL.

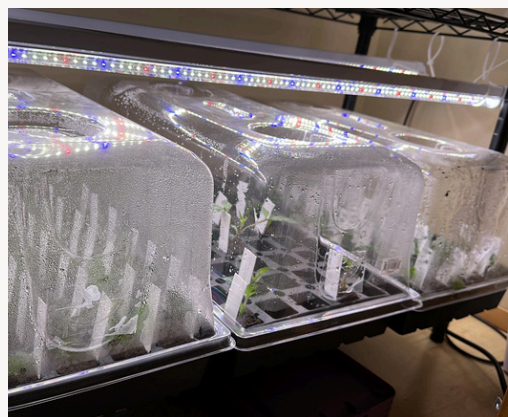


USING A DOME OVER FRESHLY GERMINATED SEEDS HELP KEEP THE SOIL MOIST. REMOVE THE DOME ONCE THE SEEDS HAVE A COUPLE SETS OF LEAVES.



ONCE SEEDS HAVE MOVED FROM THE PAPER TOWEL INTO SOIL, THEY WILL NEED LIGHT AND WATER. IF YOU ARE NOT WORKING IN A HEATED GREENHOUSE, YOU WILL NEED SUPPLEMENTAL LIGHTS. KEEP LIGHTS RIGHT ABOVE SEEDLINGS. YOUR SPACE SHOULD BE WARMER THAN 65 DEGREES TO HELP YOUR PLANTS CONTINUE TO GROW. MOVING FORWARD, MONITOR MOISTURE OF YOUR SOIL AND KEEP YOUR PLANTS THRIVING BY WATERING THEM, CAREFUL NOT TO DROWN THEM. YOU CAN KEEP THE SOIL MOIST BY GENTLE WATERING CAN OR A HEAVY SPRAY.

CONTINUE TO GROW SEEDS INDOORS UNTIL ALL RISK OF FROST HAS PAST.



EXAMPLE OF A SINK POT

AT THIS POINT YOU WILL NEED TO DECIDE IF YOU PLAN TO DIRECTLY PLANT YOUR DAHLIA SEED INTO THE GROUND OR IF YOU WILL BE DOING THE SINK POT METHOD AND PLANTING SEEDLINGS INTO 4" POTS, PLANTING THE POT AND ALL IN THE GROUND.

IF SEEDS DID NOT GO INTO INDIVIDUAL 4" POTS ONCE GERMINATED, NOW IS THE TIME TO MOVE THEM. ALLOW THEM A COUPLE WEEKS TO GROW WITHIN THE 4" POT BEFORE TRANSPLANTING OUTSIDE.

ONCE ALL RISK OF FROST HAS PASSED IN YOUR GROWING ZONE, IT IS SAFE TO TRANSPLANT YOUR SEEDLINGS FROM THEIR INDOOR GROWING ENVIRONMENT TO OUTSIDE.

BEGIN TO HARDEN OFF YOUR DAHLIA SEEDLINGS BY SLOWLY INTRODUCING THEM TO SUNLIGHT. SPEND SEVERAL DAYS, UP TO A COUPLE WEEKS DEPENDING ON HOW HOT YOUR GROWING ZONE IS. START BY PLACING PLANTS IN FULL SHADE, TO SLOWLY ADDING MORE AND MORE HOURS OF DIRECT SUNLIGHT.

ONCE YOUR DAHLIA SEEDLINGS ARE HARDENED OFF, TRANSPLANT THEM INTO YOUR GARDEN. SINK POTS WILL BE PLANTED POT AND ALL IN THE GROUND ENTIRELY UNDER THE SOIL. IF YOU ARE NOT DOING SINK POTS, TRANSPLANT SEEDLINGS OUT OF THE CELL TRAY INTO THE GROUND. DAHLIA SEEDLINGS CAN BE PLANTED CLOSE TOGETHER. EITHER PLACE EACH 4" POT SIDE BY SIDE TOUCHING EACH OTHER OR DIRECTLY PLANT SEEDLINGS 4-6" APART. DEPENDING ON YOUR SOIL COMPOSITION, YOU MAY WANT TO PLANT THE SEEDLINGS WITH FERTILIZER. A SOIL TEST A COUPLE MONTHS BEFORE PLANTING WILL HELP GUIDE YOUR FERTILIZER CHOICES. UNLIKE PLANTING TUBERS, YOUR DAHLIA SEEDLINGS WILL NEED REGULAR WATERING RIGHT AWAY. MAKE SURE TO KEEP YOUR SEEDLINGS HAPPY BY PROVIDING THEM STAKE SUPPORTS, WATER AND FERTILIZER.

IT IS OPTIONAL TO PINCH/STOP YOUR SEEDLINGS ONCE THEY HAVE 3-5 LEAF SETS. WE LIKE TO SEE A BLOOM AS SOON AS POSSIBLE, SO WE DO NOT STOP OUR SEEDLINGS. NOW IT IS TIME TO SIT BACK AND WAIT FOR THEM TO BLOOM!

YOUR DAHLIA SEEDLINGS WILL PRODUCE BLOOMS AND CREATE A CLUMP OF TUBERS DURING ITS FIRST GROWING SEASON. YOU CAN DIG AND STORE CLUMPS FROM SEEDLINGS JUST AS YOU WOULD FOR DAHLIAS GROWN BY TUBERS IF YOU WOULD LIKE TO SAVE THE BLOOM TO GROW ANOTHER YEAR.

CONSIDERATIONS:

NOT ALL DAHLIA SEED IS CREATED EQUAL AND NOT ALL DAHLIA SEED WILL PRODUCE GOOD FLOWERS WORTHY OF KEEPING.

WHETHER YOU ARE BUYING SEED OR COLLECTING YOUR OWN, IT IS HELPFUL TO KNOW THE DIFFERENCE BETWEEN SEED THAT HAS JUST BEEN RANDOMLY COLLECTED OR SEED THAT HAS BEEN SPECIFICALLY HYBRIDIZED.

DAHLIAS HAVE MANY SETS OF GENES WHICH CAUSES MANY DIFFERENT PLANT CHARACTERISTICS. IF YOUR GOAL IS TO GROW A SPECIFIC FORM OF DAHLIAS, IT IS IMPORTANT TO MAP YOUR GARDEN PLAN FOR OPTIMAL SEED. SEED COLLECTED FROM A GARDEN THAT ONLY HAS OPPORTUNITY TO CROSS POLLINATE WITH DAHLIAS OF THE SAME FORM, IN OUR EXPERIENCE, HAS SIGNIFICANTLY INCREASED THE NUMBER OF THE SAME FORM COMING FROM THE SEEDLING PATCH. SOME HYBRIDIZERS CHOOSE TO HAND POLLINATE BLOOMS TO AVOID THE POLLINATORS FROM CROSS POLLINATING.

ON A SIMILAR NOTE, OPEN CENTER BLOOMS ARE SUSPECTED TO HAVE STRONGER GENES. IF YOU HAVE OPEN CENTERED BLOOMS AROUND WHERE YOU ARE COLLECTING SEED FROM YOU ARE INCREASING YOUR LIKELIHOOD OF GROWING SEED WITH OPEN CENTERED BLOOMS.

DAHLIA SEEDLINGS CAN BE VERY UNSTABLE FOR THEIR FIRST THREE OR MORE YEARS OF LIFE. IT IS WISE TO GROW OUT SEEDLINGS FOR SEVERAL YEARS BEFORE SHARING THEM WITH OTHERS.

