How to Grow Your Own Bonsai Trees from Seed



Contents

1)	<u>Introduction</u>
2)	Seed Types and Characteristics
3)	Seed Treatments
4)	What You Will Need
5)	Collecting or Buying Your Seed
6)	Storing Your Seed
7)	Sowing Your Seed
8)	Pricking Out and Potting On
9)	Initial Pruning
10)	Some of the Best Tree Varieties
11)	<u>Useful Links</u>
12)	About the Author

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Introduction

Growing bonsai trees from seed is surprisingly easy and can be an incredibly rewarding experience. Germination on many types of tree seed is good with a large percentage achieving germination if fresh seed of the correct types of seed are chosen.

Contrary to what many people may think growing trees from seed can be fast and growth is quite rapid on many varieties. Most of all this can be done on a small budget and in no time at all you will be able to have plenty of small trees of different varieties to grow and train into bonsai.

This eBook will teach you the basic principles of seed sowing, from how to choose the best varieties, whether to collect or buy the seed, and how to sow the seed with advice on caring for the seedlings. It will also give a description of how to treat all the most popular tree seed types for bonsai.

As a hobby, keeping bonsai is an extremely rewarding experience and when one grows the bonsai trees from seed it is even more so as you can develop a personal relationship with each tree having seen its development from germination to tree.

Personally I can never cease to wonder that contained within a tiny tree seed, perhaps the size of a pen tip, is all the genetic information to enable the seed to develop into a massive tree that can live for centuries and support many different creatures and eco-systems.

One of the main advantages of growing trees from seed is that it costs so little, and if the seeds are personally collected then there is no outlay at all which is even more satisfying.

One of the most important ecological issues today is the diminishing areas of natural forest and if more people grew their own trees and taught their children how easy this can be, it can go some way to increasing awareness of how valuable trees are to mankind.

Whether you live in a tropical country in the southern hemisphere or in a cool temperate region of the northern hemisphere, the treatment of seeds for sowing may be different. What is common though is that you will be amazed and delighted at your collection of germinating tree seedlings which will continue to fascinate you as these quickly develop into larger young trees. This to me is what nature is all about.

Flamboyant Tree Seeds (Delonix regia)



Boer-bean Tree Seeds (Schotia afra)



Seed Types and Characteristics

 ${f T}$ here are many different types and classifications of tree seed. There are those which require a period of dormancy while others are best sown immediately. Some seeds may take several years to germinate while others will start sprouting within a week or two of being sown.

With over 20000 different types of trees found in nature, there are many different variations of seeds. Trees can be divided into two different classifications, namely Gymnosperms and Angiosperms.

Gymnosperms are non-flowering trees which include the Conifers such as the Pine. Angiosperms are flowering trees, often deciduous, which means they will lose their leaves in autumn or winter. These are the broadleaf trees such as the Hornbeam and Maple.

These Angiosperm trees can be further divided into those with fleshy fruits such as the apple and pear, those with winged seeds such as the Maple and those with pods and husks such as the Acacia.

Some tree seeds have a very hard seed coat which will need treatment in order to germinate fairly quickly while others do not require any treatment. Nature devises ingenious ways to disperse seeds of all types and the method of dispersal will influence the physical characteristics of the seed e.g. a winged Sycamore tree seed that enables the seed to travel distances on the breeze.

Tree seeds that are not described as dormant will germinate when there is sufficient moisture and warmth while dormant seeds may require several seasons of being subjected to the weather and different temperatures before their dormancy is broken. It is possible to encourage the breaking of dormancy by subjecting the seed to artificial conditions which will speed up the process.

Some tree seeds can be kept in storage for lengthy periods and still achieve good germination-such seeds can be described as having good viability. Other seeds need to be sown as soon as possible after being collected-these have short viability. Generally the fresher the seed the better the viability. When buying seed from a dealer it is important that the seed is from a recent harvest. Many commercial sellers of tree seeds will specify the date when the seeds were harvested.

All seeds will require moisture and some degree of warmth in order to germinate. Oxygen is also needed for the embryo to develop. These conditions will occur in nature with the onset of spring usually bringing higher temperatures.

Seed Treatments

Dormancy is the process where nature ensures that the seed will not begin to germinate until conditions are ideal for the young seedling to have the best chances of survival. If a tree seed were to germinate immediately before the onset of a harsh winter then the chances are that it would not be strong enough to survive.

Equally, a tropical tree germinating just before the onset of the dry, winter season would not be able to survive. In order to achieve a good germination, treatment may be required depending on the type of seed. Treatment may be either scarification or stratification.

Scarification

Scarification is the treatment for seeds with very hard seed coats. This treatment involves soaking these seeds in very hot (but not boiling) water for about 48 hours. The hot water is then able to penetrate the seed coat to break dormancy.

This treatment is excellent for many of the tropical seed varieties such as the Acacia and Baobab, and Flamboyant and also is useful for Northern Hemisphere tree seeds such as Pine seeds and Hawthorn. Once the seeds have soaked, dry them out by laying them on a newspaper or paper towel to dry out. They will then be ready for sowing.

Stratification

Stratification (sometimes called cold moist stratification) is a treatment where the seeds are kept in a refrigerator for 1-4 months at a temperature of about 3C (37F). They should be soaked in cold water for about 24 hours beforehand, dried out on a sheet of paper and then placed in a sealed plastic bag.

To keep the seeds just very slightly moist, mix the seeds with a combination of sand and vermiculite or peat (roughly 50/50 mix) which has been just slightly dampened. The advantage of stratification is that the conditions of nature ie a cold winter, can be reproduced at any time of the year. So if one buys in some seed during late spring or early summer they can then be stratified in the refrigerator for a month or two and then sown.

It is important to note also that there are some trees that have a fleshy covering to the seed usually in the form of berries, such as the Hawthorn or Rowan tree. This fleshy covering or berries produce a chemical growth inhibitor to the seed which prevents germination.

In order to treat the seed the fleshy covering must first be removed and this can be done by rubbing the seeds in a sieve under a running tap which can separate the seed from the berry. They can then be stratified or sown directly depending on the season.

What You Will Need

 ${f T}$ ree seed sowing is generally inexpensive when growing trees for personal use or on a small scale. The equipment that is required is minimal. It is useful to keep in mind though that a greenhouse is always desirable when growing any seeds as this can protect the young tree seedlings as well as your seed trays. Even if one does not have a greenhouse then tree seeds can easily be grown either indoors or outdoors.

Perhaps the most important equipment that you will need will be trays in which to sow your tree seed. These can be of varying sizes and can even be made up out of wood or old fruit boxes. The best trays to use though are the plastic standard size seed trays available in any garden centre, which measure 37.3cm in length by 24cm wide and have a depth of 5.5cm.

This is a standard size in the horticulture industry and it is always better to buy a heavy-duty plastic as the lightweight trays often will not last longer than one or two seasons. If one is to sow smaller quantities of seed, then there are even smaller trays which are very useful and can measure $23 \text{cm} \times 17 \text{cm} \times 6 \text{cm}$. A mini seed tray can be used for smaller quantities of seed and measure $15.5 \text{cm} \times 4.5 \text{cm}$.

If one is to keep the seed trays outdoors then it is advisable to use a clear plastic or Perspex lid to place on the seed tray to keep pests from the seed. These can easily be found on the internet as well. A covering of clear plastic sheeting can also be used for this purpose, which is stretched over the seed tray and ideally raised slightly above the rim by an inch or two.

This will also assist in raising the temperature when spring approaches. Never underestimate the damage that can be done by rodents (mice and rats) and birds to seed. They have an ability to smell seed (in the case of mice) from a long distance and birds have an instinct to dig up and eat seed in sown trays.

To insert seed into the compost a tool called a dibber is used. These can be made of wood or plastic and are easily found on the internet. They are used for making a hole in the compost into which the seed is placed. A pencil or pen can easily be used for this purpose as well.

A compost presser can be used to firm up the compost in the trays. This is usually a flat piece of wood with a small handle which can easily be made. One can easily use a piece of plywood which is slightly smaller than the size of the seed tray for this purpose and glue a small handle onto it.

Propagators are electric units which supply heat to the base of seed trays to speed up germination. These can be bought in a range of different sizes and prices to fit ones budget. They are very useful when germinating certain types of seed, especially tropical types and when one wishes to speed up the germinating process, towards the end of winter, and the beginning of spring.

The other most important item to include is the compost or growing mediuwhich will be referred to later.	um

Collecting or Buying Your Seed

Collecting your own seeds from trees can be fun and will not cost anything. It is always important to obtain permission when collecting seed from private or commercial land but this is usually readily given. If collecting seed from public forest areas or parks there is usually not a problem but it is always advisable to check with any public officials beforehand.

Usually one can tell when seed is ready to harvest by the coloration of the seeds and it will appear brown when ripe. Many seeds such as Maple seeds can be picked just before they have fully ripened and begin to turn brown.

Tree seeds can be collected in a plastic or paper bag but always ensure that if kept in a plastic bag that they are open to the air or they can develop mould and fungus if slightly damp.

If the seeds are from the Northern Hemisphere they can then be stored, if necessary in a refrigerator, in a sealed bag prior to stratification or sowing. Seeds from tropical or sub-tropical climates are best stored at a slightly cool temperature, or room temperature but not in the refrigerator.

Personally I believe that it is always best to collect or buy more seeds than you think you may use, as there will be those that do not germinate in the first year. One can always give away or sell young trees that are excess to requirements or better yet, plant these out in areas where they will be enjoyed.

There are many different commercial suppliers of tree seeds and the supplier will depend on whether you require small amounts of seed or larger quantities. Hudsons Seeds in the U.S. are good while in Europe an excellent supplier is Sandeman Seeds based in France. For African tree seeds Silverhill Seeds of South Africa is excellent.

All of these suppliers stock a wide range of varieties in quantities to suit most budgets and also have online catalogues. B&T Seeds also is an online catalogue with a massive range of seed varieties.

eBay is another brilliant source of seed supplies and one can easily verify the performance of the supplier by their feedback. It is also a very inexpensive method of buying tree seeds whether small or large quantities.

One should always check the quantity being sold against the price and compare prices. It is also useful to find out the number of seeds per gram. This can easily be done by doing a google search for the seed count of the scientific name of the tree variety, e.g. 'number of seeds per gram Pinus thunbergii'.In this way you will be able to find out exactly the number of seeds you will be paying for.

The final chapter of this book will list all the best tree varieties for bonsai.

Storing Your Seed

Seed which is not going to be immediately sown or stratified will need to be stored correctly. Storage of seed is not a complicated process and will basically depend on the type of seed involved.

If the tree seed is from a cool Northern Hemisphere country eg US or Europe then this seed is best stored in a cool refrigerator but not the freezer compartment i.e. at a temperature of about 3-5C (37-41F).

They can be kept in a sealed plastic bag and it is a good idea to check the seeds every so often. Remember that if the seeds have a fleshy covering or are enclosed in berries such as Hawthorn or Rowan, then these fruits need to be separated from the seeds using a sieve, and then washed in water and dried before storage.

Tree seeds from Southern Hemisphere countries which may be warmer and either tropical or sub-tropical can be best stored at a cool temperature or at room temperature of about 10-15C where they can keep their viability for years such as Baobab or Acacia seed. They can then be sown in spring or summer when temperatures have risen sufficiently to support the seedlings or earlier if a heated greenhouse is available for growth.

An important point to note on the timing of sowing seeds is that the germinating seedlings will require good sunshine levels to flourish. In nature this will usually coincide with spring.

This involves the day length and the hours of available sunshine, and whether this time is increasing or slowly decreasing, as in autumn. Trees and seedlings are amazing in how they can detect this.

If seedlings have been induced to germinate towards the end of autumn for example they will not have sufficient sunshine to continue to grow as they would in spring and so may not survive.

However some tree seeds that do not require this period of dormancy will germinate as soon as the seeds fall from the tree in early autumn such as the Chinese Elm. For this reason I would not suggest sowing seeds in late autumn, whether in the northern or southern hemisphere.

Coral Tree Seeds (Erythrina lysistemon)





Sowing Your Seed

When to sow tree seed

Timing when to sow your tree seed will depend on whether you wish to stratify the seed or allow nature to act on the seed over the course of winter. This applies only to the cool temperate tree seed varieties.

If you are going to stratify your seed then the best time to sow this seed is just before spring (end of February, early March in US/Europe).

If however you are not going to stratify your seed then it is best to sow your cool temperate tree seed varieties over winter to allow the cold and freezing weather to treat the seed in their seed trays.

Most of these varieties are best sown as soon as they have been harvested or bought in, and over the course of the winter they will be subjected to varying temperature levels which, when the temperatures rises in spring will break the dormancy.

The seeds will need to be watered in the trays once sown (usually only once over winter, keeping just slightly damp but not too wet) and it is always a good idea to soak seeds in warm water prior to sowing.

Tree seeds that are from tropical or sub-tropical regions and which have a hard seed coat, can be scarified by soaking in hot water for 24-48 hours just before sowing in spring or early summer.

It is important wherever one lives that these tropical types are sown when all danger of frost is over and that sunlight levels are high enough (in the northern hemisphere).

If sowing these types in the northern hemisphere then it is advisable to keep the seed trays either in a greenhouse (heated greenhouse is best) or where they can receive sufficiently high temperatures to assist germination. Sunlight levels also need to be high once the seedlings have germinated.

Both tropical and cool temperate varieties can also be sown throughout most of summer, but spring is best to give them a head start for the growing season.

Where to Sow your Seed

Tree seeds can be sown in any of these different areas and the location of your tree nursery will depend on your requirements and resources:-

In a cold greenhouse outdoors -this is ideal for cool temperate varieties.

In a heated greenhouse outdoors-this is best for tropical varieties.

In seed trays outdoors which have been protected from pests such as mice.

In prepared seed beds outdoors. This is a good method for large-scale seed sowing

anywhere in the world.

Care will need to be taken to reduce losses through pests and a sheltered area is recommended such as a shade area. One can also sow tree seeds indoors in a sunny position on a windowsill or conservatory. Care will need to be taken to provide optimum temperatures for germination and then correct sunshine levels for the seedlings.

Growing Mediums for Seed

As you can imagine there are so many different types of soil and compost mixes to choose from when growing plants or sowing seed. It is very important though to use the best possible growing medium for your tree seeds.

If the soil consists of very small particles then there will be insufficient drainage through the seed tray and the seeds will become waterlogged and can rot. Another consequence of bad drainage can be the growth of moss and liverwort.

If though the particle size is too large and drainage is too rapid then the medium can dry out too rapidly which will kill the emerging seedlings or dry out the germinating seeds.

An excellent way to get the best seed tray soil is to mix it personally. For this you will need just normal garden centre compost and fine vermiculite. Vermiculite is mica which has been treated so that it has expanded and this enables it to hold water and it also has excellent aeration properties.

If one mixes fine vermiculite with normal compost roughly in a 50:50 ratio, it will have perfect qualities for seed sowing. It is even better if the compost can be sieved prior to mixing, using a garden sieve which can be found in most garden centres. Vermiculite is easily bought on the internet (eg eBay) or through mail-order garden catalogues and is well worth investing in as it is also brilliant for mixing a potting mix for later planting out.

When using prepared seed beds outdoors the soil will either require sieving in order to obtain the correct tilth for seed sowing or a fair degree of preparation. Soil is best prepared by digging over (single or double digging) and then forking over.

The next stage is repeated raking with both a broad rake and then a fine rake to break up all the larger soil clumps and clods. Vermiculite again is very useful to mix in with the raked or sieved soil in order to blend a perfect medium.

Outdoor seed beds can also be prepared on a large scale by rotavating the soil and repeated raking which can also achieve a fine tilth or soil particle size. It is always better to raise the beds either by raking them to a raised level or by building wooden raised beds.

Wooden raised beds are ideal as the young tree seedlings can be kept in these beds until they are ready for uplifting and planting into pots. These types of beds also hinder any pests such as slugs entering the seedlings and are easier to work with and well worth the effort in constructing them. It is best to use hard-wearing treated wood. Used scaffolding planks are ideal.

There are a number of benefits of growing tree seeds in outdoor beds.

Conditions are ideal for trees outdoors and the natural soil that is used will contain potassium, nitrogen and phosphorous which are the essential elements for growth. Another factor to consider is that water is drawn up through the soil and on the whole outdoor seed beds will require slightly less watering than seed trays in a greenhouse.

Sowing

When the time comes to sow your tree seed it is always best to have the seed tray or area prepared beforehand. Often it is advisable to very lightly spray the soil surface with water to lightly dampen the soil which can then 'bind' it for making the seed hole.

The next stage is to use your dibber (or whatever you use for this purpose) to make the holes for the seed. A rough approximation for the depth of the hole for the seed is about 2-3 times the length of the seed. An acorn for example would then be sown to a depth of approximately 2-2.5 inches (5-6cm), while a pine seed should be sown to an approximate depth of 8-10mm.

The dibber can be used to make the seed holes in the soil, spacing these in a straight line about 4cm apart and about 5cm between the rows. The spacing will also depend on the size of the seed.

The important principle here is that the emerging seedlings will have a small space between them so that they don't compete too heavily for sunlight and nutrients. However this is not a hugely important issue and even if some of the seedlings are growing fairly closely together, they can easily be separated out at a later stage.

When sowing seeds that are very small in size and fine such as Rowan, Chinese Elm or Jacaranda, you can easily 'sprinkle' these on the surface of the seed tray, ensuring that they are spread out as evenly as possible, by releasing them through your fingers or gently tapping out the seed packet while moving it over the tray.

The surface is then lightly spread over with vermiculite or sieved compost so that it just covers the seed and does not cover it too heavily.

It can also be a good idea with this fine seed to leave one or two seeds just exposed so that you can observe when the seeds start to germinate.

Once the seeds have been placed in their holes, then these holes should be lightly covered over with soil by hand.

Finally the seed trays should be lightly watered with a fine spray so that the soil is just slightly moist. If it is too wet for too long then the seeds can rot.

When seeds are sown over autumn or winter to be left outdoors, or in a cool greenhouse, then they should not require much water during winter but the soil should still be monitored to ensure that it does not dry out.

If seeds are sown in spring or summer then the soil will need to be monitored much more carefully as they will require fairly regular watering.

Another easy way to sow seed in larger trays or in seed beds is to draw a line in the soil with a stick or the handle of a rake, to the depth required.

You can achieve a straight line by laying a twine down between two pegs, if the beds are large outdoor seed beds. The soil can then be lightly covered over the line once the seeds have been sown with regular spacing

Tree seeds can be sown indoors at home easily as well by placing your trays

on a windowsill which receives good sunshine. Another good position at home is a conservatory. One of the simplest methods would be to sow the seeds in a small pot and leave these on the windowsill.

Pricking Out and Potting On

When the tree seeds have started to germinate it is an amazing time. It is definitely one of the most satisfying things, to achieve a good crop of tiny tree seedlings full of promise. However it is also one of the most important periods as these tiny seedlings will be at their most vulnerable.

Most seedlings will germinate in spring when the weather has begun to warm up and sunshine levels have increased.

In the Northern Hemisphere spring is usually slightly cool with sunny days depending on which country one lives.

If the seedlings are being grown outdoors than they will need protecting from an increased activity of pests such as mice, birds and now slugs.

Any of the pests can wreak havoc with tree seeds and any measures that can be taken to prevent this should be undertaken.

Outdoors seedlings will also need to be checked for water requirements at this stage and it is advisable to use a very fine spray on a hosepipe or watering can as a strong jet can damage small seedlings.

If the sun is particularly strong in early spring or summer, then it can scorch tender seed leaves. This is particularly true for Japanese Maples which will also suffer from scorch when subjected to a cold wind.

In spring and summer it is not uncommon to experience strong storms and even hail, all of which will damage seedlings which is another good reason to enclose any seedling nursery with shade cloth or similar protection.

If your seed trays are being kept in a greenhouse or polytunnel, then the increased temperatures in spring can be rapid on a clear day. The windows of the greenhouse will need to be opened to allow for cooler air to circulate or the seedlings can rapidly be burnt or dry out.

Increased sunshine levels are magnified in a greenhouse or under plastic so this can rapidly lead to scorch. It is a good idea if keeping seedlings in a greenhouse, to cover the glass with shade cloth or whitewash at this time, to reduce light and heat build up.

It is also a good idea to start to acclimatise your seedlings to the outdoors now, by bringing them outside for periods. If these are tropical types though they are better left in the greenhouse until all danger of frost has gone and temperatures are much higher in summer.

Initial Pruning

During the first year of growth I believe that it is best to leave young tree seedlings to grow on in their seed trays. After the first year or after at least 6 months of growth one can perform what is called 'pricking out' of the seedlings and transplant these into pots or larger trays.

This involves very gently removing the seedlings and ensuring that minimal disturbance is done to the fine root hairs. A desert spoon or a tea spoon is a good tool for this purpose.

The seedlings are then separated out and transferred to pots to grow on. A very good pot size for this stage of growth is the 10cm in height plastic pot. Care must be taken not to damage the tiny feeder roots at this stage. They can also at now be planted out into outdoor beds.

Usually this task is best performed when the seedlings are dormant, but if care is taken then this can be done when growth is active. If temperatures are very hot then the added stress of transplanting can be damaging to the seedlings. It is very important to water in the young seedlings thoroughly after they have been planted out into their new pots or bed.

Once the trees have completed their second year then they can receive initial pruning to develop growth into the style of bonsai required. The advantage of having a range of young tree seedlings is that they can now be developed into a number of different bonsai styles.

Group and forest plantings can be started at this stage and the young trees will 'grow into' the location and achieve considerable girth and size in their new pot. Wiring can also begin in the second year of many varieties especially with Conifers which are very flexible having higher oil content than other tree types.

During their first and second year of growth, tree seedlings will be vulnerable to water stress as well as sun scorch. For this reason it is always better to grow seedlings in a sheltered area perhaps with some shade cloth to protect from the worst of the suns rays.

Young trees will also require regular feeding a couple of times every month during the growing season and it is a good idea to include some slow-release fertiliser granules in the potting soil mix to assist with nutrient levels.

Some of the Best Tree Varieties to Grow from Seed

Over the years I have sown large quantities of tree seeds of many different types. Some varieties are easy to grow while some can take much longer to germinate. There are a few varieties that I have been unable to grow from seed.

The following is a list of all the tree varieties that I have found to be either easy or relatively easy to grow from seed, and are all brilliant types for bonsai or garden use.

Wherever one lives it is always interesting to experiment with the seeds that are available to collect fresh and this list is by no means exhaustive of the types that can easily be grown from seed-they are just ones that I have personally found to be easy to grow.

Cool Temperate (Northern Hemisphere) Varieties

Chinese Elm (Ulmus parvifolia) No treatment. Sow early autumn/spring/summer.

The Chinese Elm is one of the most popular of all bonsai trees and is easy to grow with fresh seed from a reliable supplier (see supplier list). Sow lots of these inexpensive seeds and cover with a fine layer of vermiculite/compost. Really brilliant little trees to grow and fully hardy/indoors/outdoors.

Japanese Larch (Larix leptolepsis) Stratify/sow late winter/spring.

Another easy and rewarding variety, where you get many seeds for a low price. These are one of the best conifers for bonsai and are deciduous, with their needles turing a golden colour before they shed in autumn. They grow naturally in a bonsai style.

Japanese Black Pine (Pinus thunbergii) Stratify/sow late winter/spring.

Another very popular conifer/pine variety, where you get a lot of seeds for a low price-fairly slow-growing and will need careful training, but extremely rewarding & evergreen.

Korean Hornbeam (Carpinus turczaninowii) Stratify/sow late winter/spring.

A lovely little tree with heart-shaped leaves and trunks which develop an aged appearance early on.

Dawn Redwood (Metasequoia) No treatment/sow early autumn/spring.

These are ancient prehistoric trees that were recently discovered. They have delicate fernlike leaves which are compound and deciduous-very popular trees to sell, and cinnamon bark on their trunks-seed is fine but germinates easily if fresh.

Japanese Maple (Acer palmatum) Stratify/sow late winter/spring.

Another very popular variety which always sells well. Their leaves have excellent autumn & spring colouration, and they germinate easily

Hawthorn (Cratagus monogyna) Stratify/sow late winter/spring.

Hawthorn seed can be collected easily enough for free. Remember that the fleshy fruit part will need to be removed by mashing in a sieve. The trunks have a good aged appearance.

Oak (Quercus robur) No treatment/sow autumn/spring/summer.

The English Oak is a very popular and well-loved tree. Seed must be sown fresh and has one of the best germination percentages. Failrly slow-growing, but worth it.

Zelkova (Z carpinofolia) Stratify/sow late winter/spring

This is a species quite similar to the Elm, and grows naturally in an easy to work bonsai style, with good germination. Brilliant trees to grow, quick with excellent girth on the trunk, quickly.

Ginko (Ginko biloba) No treatment/sow autumn/spring/summer.

Popular trees to sell and also to keep, with unique shaped leaves-a prehistoric tree in terms of classification. Easy to germinate with fresh seed.

Cotoneaster (C. horizontalis) Stratify/sow autumn/spring/summer.

Seed od Cotoneaster can be collected, and as with Hawtthorn, the fruit part must be mashed and removed in a sieve. These are semi-evergreen and can do reasonable well indoors, but also fully hardy with nice white flowers and berries.

Pyracantha (P. angustifolia) Stratify/sow autumn/spring/summer. Similar to Cotoneaster but with slightly larger leaves and sharp thorns.

Tropical or Sub-Tropical (Southern Hemisphere) Varieties

Acacia varieties. Scarify/sow spring/summer

The Acacias have many species and are brilliant as exotic/niche trees for bonsai. A.galpinii is a brilliant species. They have delicate compound fern-like leaves and are the classic savannah tree of Africa.

Silk Tree (Albizzia julibrissin) Scarify/sow spring/summer

Also has delicate fern-like compound leaves and is fairly hardy.

Baobab (Adansonia digitata) Scarify/sow spring/summer

Classic iconic tree of Africa and Australia & Madagascar. Exotic and popular, easy to grow from seed, needs warmth and needs to be kept dry when dormant.

Orchid Tree (Bauhinia galpinii/petersiana) No treatment/sow spring/summer

These have lovely flowers when mature.

Coral Tree (Erythrina lysistemon) Scarify/sow spring/summer

Another very popular tree with unique flowers and trunks. Bright red seed.

Flamboyant tree (Delonix regia) Scarify/sow spring/summer

I would say the most beautiful tree in the world, but not so easy to grow in the northern hemisphere without supplementary heating and also lighting.

Leopard Tree (Caesalpinia ferrea) Scarify/sow spring/summer

This tree has tiny compound leaflets and a lovely speckled trunk.

Boer-bean tree (Schotia afra) Scarify/sow spring/summer

Another highly recommended African tree with copper coloured leaves in spring, and cracked aged trunks.

Stinkwood (Celtis Africana) Scarify/sow spring/summer

One of the best trees for bonsai and also hardy/deciduous.

Leucaena (Leucaena leucocephala) Scarify/sow spring/summer

These are definitely worth growing, with lovely ferny leaflets and aged trunks and so easy to germinate.

Jacaranda (Jacaranda mimosaefolia) No treatment/sow spring/summer

Grown world-wide in the tropics as a street tree for their lovely blue flowers-their leaves are tiny leaflets that are very eye-catching-easy to germinate.

Natal plum (Carissa macrocarpa) Scarify/sow spring/summer

Another good African tree with the best perfume on white flowers-evergreen and fairly hardy.

Useful Links

Sandeman Seeds. An excellent source of a wide range of seeds especially tree seed. Based in France

http://www.sandemanseeds.com/info.asp

Hudsons Seeds. Very good US supplier of tree seeds

http://www.jlhudsonseeds.net/

Silverhill Seed . Very good South African supplier of African tree seeds. Useful for exotic/niche varieties, especially Acacias

http://www.silverhillseeds.co.za/

Forestart Seeds-have a good range of seeds in UK

http://www.forestart.co.uk/shop/6_Bonsai

Angelgrove Seeds-Good Canadian supplier of tree seeds

http://www.trees-seeds.com/

Misho Bonsai-another good Canadian bonsai seed supplier

http://www.mishobonsai.com/

Thompson & Morgan-an intern

ational company of high repute-they can do smaller quantities of trees veg & flowers

http://www.thompson-morgan.com/

B&T World Seeds offers probably the most extensive catalogue of tree seeds-based in France

http://b-and-t-world-seeds.com/

Seedworld Australia-a large selection of Australian native seeds.

http://www.seedworld.com.au/

About the Author



Bruce has been fascinated by bonsai from an early age and has been keeping and growing trees for about 20 years. He grew bonsai trees from seed and also used to buy finished and trained wholesale imported trees. Bruce particularly enjoys growing trees and plants from seed and has always found this to be the most cost-effective way of growing plants. He is a self-employed garden landscaper and has recently started to write eBooks for Amazons Kindle.

Table of Contents

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Seed Types and Characteristics

Seed Treatments

What You Will Need

Collecting or Buying Your Seed

Storing Your Seed

Sowing Your Seed

Pricking Out and Potting On

Initial Pruning

Some of the Best Tree Varieties to Grow from Seed

Useful Links

About the Author