

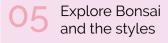
EUROPEAN HORNBEAM

CARPINUS BETULUS





TABLE OF CONTENTS



Bonsai equipment and accessories

Lifetime support and email tips

11 Optimal growing environment

Cold stratification and top tips

Frequently asked questions

17 Species info and sowing instructions

21 Common Bonsai terminology



FOLLOW OUR SOCIALS





DISCOVER THE ART AND BEAUTY OF BONSAL

Bonsai is a Japanese term that translates to "planted in a container". The art form is derived from an ancient Chinese horticultural practice, part of which was then redeveloped under the influence of Japanese Zen Buddhism. Originally only the elite of the society practiced Bonsai with native-collected specimens and the trees were spread throughout China as luxurious gifts.



The time and dedication this process requires is unlike almost any other form of artwork. While the work is almost a form of sculpture, the trees are living things and will always react in their own way.

Bonsai requires enthusiasm and commitment, as the trees can live for hundreds of years and can be passed down through the generations. The oldest known Bonsai is over 1,000 years old and is displayed in the Italian Bonsai Museum 'Crespi'.

Fortunately the art form allows it to be approached in many different ways. Growing from seed gives you the freedom to choose your Bonsai style and begin guiding the tree's growth. The five basic styles are classified according to the angle of the trunk.



FORMAL UPRIGHT



INFORMAL UPRIGHT



SLANTING



SEMI-CASCADE



CASCADE

COMPLETE YOUR EXPERIENCE

BONSALTOOLS

Maintain your tree's health with specialist, high-quality Bonsai tools. Prune and shape your tree to keep it healthy and thriving. You can grab more value with one of our custom bundles to get you started







BONSAI BOOKS

Add to your knowledge, tearn new techniques and develop your understanding with a variety of specialist Bonsai books. Pick up a photo-book showcasing the best from around the World.







BONSALKITS

Whether you are looking for an easy starter kit without the need to visit a garden centre or seeking a gift for a loved one, our premium kits are the way to go. Begin your Bonsai journey and grow your dream tree.







BONSAL POTS

House your Bonsai in a stylish handmade ceramic pot with drainage holes. Brows our collection to find the perfect container for your tree, and choose from an array of colours, sizes and shapes.







BONSAI SEEDS

Browse our selection of seeds for Bonsai with over 50 types available, each under £2. Choose from iconic species for both Indoor and outdoor Bonsai. Make the most of a discount with our 'Seed of the Week'







BONSAI CARDS

Our themed greetings cards are great for all Bonsai enthusiasts to enhance a gift. We have partnered with local UK artists with these unique designs. All cards have a luxury soft-feel bouch.





8







We are here to make your Bonsai experience as easy and enjoyable as possible. This is a hobby for everyone, no matter your gardening background!

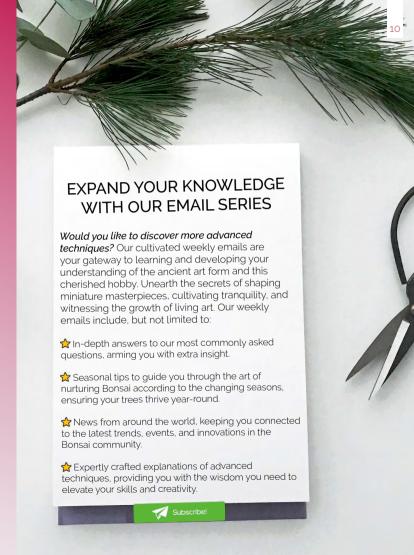
All seeds have undergone three germination tests

We pride ourselves on stocking only the highest quality of seeds, and ensuring that you are set up for success. Our batches of seeds are fresh, and we plant them ourselves if there are any left after a few months.

Become part of a Bonsai Community

Join like-minded enthusiasts and beginners within the Yugen Community. Share your progress and learn from fellow Bonsai





CREATING THE OPTIMAL **GROWING CONDITIONS**

Tree seeds cannot simply grow in any environment around the World, but you will need to nurture the soil and create optimal conditions to encourage growth. For example, the daily hours of sunlight, the components of the soil mixture, depth of the soil, watering frequency, humidity, temperatures, and many more factors all affect the speed of seed germination. A slight difference in one of these aspects between two growers can cause germination times to differ by months.

Please be aware that many types of plants such as vegetables and succulents have been genetically modified over many years to encourage quick growth and enable mass production, whereas these are natural tree seeds with their natural germination times. Some tree species can take over a year to germinate, none of our seeds take this long so don't worry. The shorter germination times of other house-plants can distort expectations for all other seeds unfortunately.

A key aspect of the art of Bonsai is patience so don't give up!

ARE YOU SOWING OUT OF SEASON?

Sowing seeds in season means planting them during their natural growth period, usually at in spring, which aligns with optimal conditions for germination and growth. Sowing out of season requires adjusting the growing environment, providing controlled temperature, light, and moisture to simulate favorable conditions.

You can still achieve success out of season by using grow lights, heating pads, or indoor setups. Remember, in-season sowing has higher chances, while out-of-season demands more effort to mimic nature's timing.



SUNLIGHT

TEMPERATURE



HUMIDITY

Use the propagation bags to increase the humidity but ensure you poke air holes into

SOIL MIXTURE

standard soil/compost mix from your local garden centre will do the job just fine. Avoid





DEPTH OF SEED

OUR TOP TIPS

Germinating seeds in spring produces the quickest results with longer hours of sunlight and warmer temperatures. You can experience success at all times of year as long as you manipulate the growing environment to mimic the conditions in spring. For example, using an artificial growing lamp to simulate more sunlight and a heating mat for higher stable temperatures. Planting your seeds in winter and leaving the pots will be similar to trying to grow tomatoes or strawherries, it simply won't work!

Some species require a warm treatment before the cold stratification steps and sowing. This includes soaking the seeds in warm water for a short period of time. We recommend refreshing the water every few hours if possible to keep the solution warm.

To increase the changes of germination, you can gently scratch the seed shell to encourage the process to begin, also known as 'Scarification'. This helps the seed to absorb more water as most seed coats are waterproof. Be very careful as you want to avoid damaging the embryo inside. Use a nail file or knife to pierce the shell, or sand through the coat using a piece of sandpaper.



COLD STRATIFICATION

Every type of seed is unique and needs a different treatment process before planting. For each type of seed you have, check the sowing instructions to determine whether or not your seeds need cold stratification.

In nature, seeds require certain conditions in order to germinate. Seed stratification is the process whereby seed dormancy is broken to promote this germination. For the stratification of seeds to be successful, it is necessary to mimic the exact conditions that they require when breaking dormancy in their natural habitat.

Some seeds require a warm and moist treatment, while others require a cool and wet treatment. Make sure to check the sowing instructions for the different types.

After you have completed the cold stratification process, you are ready to sow your seeds in your pots with soil/compost. Germination can take some time so remain patient and don't panic if you don't see your seeds sprouting straight away.





* Do I plant all of the seeds together?

Try to spread your seeds out as much as possible to ensure that the root systems do not become entangled and fight for the nutrients in the soil. Separate out the seedlings into their own individual pots as soon as they sprout and are strong enough to survive disruption.

* Will each seed grow a tree?

In theory yes, but not in reality. Nothing is ever guaranteed or certain with nature. The first few stages of life are where the trees will be at their most vulnerable and not all will survive unfortunately.

* How often should I water my seeds?

This depends on the season and your local climate. Aim to keep the soil warm and moist at all times, and stop the mixture from drying out. This can range from twice a day in summer to once every few days in winter. A simple touch test of the soil will give you a good indication.

* What soil or compost mix should I buy?

Don't worry about buying any specialist soil mixes to grow your seeds as these are more suitable for mature trees and repotting. Use a standard seed growing mixture with perlite.

The best Bonsal soil mixes for future reference have Lava Rock and Akadama as components to promote.

* How much natural sunlight is required to grow my Bonsai?

Aim to expose your tree to as much direct sunlight as possible. The optimal amount varies per species, but a good target would be 8-12 hours a day. Use a growing lamp to top-up any lost hours.

* How big will my tree grow?

This is completely up to you! The larger the pot, the bigger the root system will grow and the more growth the tree will have. The smaller the pot, the root systems will be confined and will restrict the growth.

* How long will it take to grow a mature Bonsai?

There is no true answer as your tree will never stop growing. The speed of growth is very dependent on the growing conditions. The smaller the tree you would like, the less time it will take. Most Bonsai are referred to as mature after 5-10 years.

* When is best to plant the seeds?

We recommend planting your seeds indoors initially so any time of year. You are in a much better position to control the growing conditions and give yourself the best shot at growing a strong tree. This will also protect the tree from the harsh conditions outside including strong winds and fluctuating temperatures at night.

* My seeds are floating in water, does this mean they are duds?

No! The seed floating test is a myth that is sadly still being circulated. This has very little correlation to the viability of the seeds. If a seed floats in water, it can mean that it has some trapped air within the shell along with many other possibilities. You will often find that this varies between species as well, with some sinking straight away, others floating for a few hours before sinking and some simply only float.

* What size pot should I use?

It depends on how large your tree is or you would like to grow your Bonsai. The general rule of thumb is that the length of the pot should be two-thirds the height of the tree.

* Do I need specialist tools?

Not necessarily, however specialist Bonsai tools will maintain your tree to a higher standard with cleaner cuts and avoid damaging the Bonsai. Different tools including a starter bundle are available on our website.

* Help! My seeds aren't growing!

Don't give up! The germination process can take some time and varies between species and growing conditions. If no seedlings have pushed through, this may indicate that your growing environment is not suitable.

Send us an email if you would like some tailored advice.

* I have more questions!

Email us anytime at customerservice@yugenbonsai.com and we will get back to you as soon as possible.

EUROPEAN HORNBEAM

Carpinus Betulus is native to Europe and Eastern Asia, with the ability to grow up to 80ft tall in nature.

The European Hornbeam has densely textured foliage, and a slate and smooth looking grey bark. The dark green leaves turn an attractive yellow in the autumn. The tree produces green catkins from late spring, turning to clusters of winged fruit in autumn providing food for wildlife.

The name Hornbeam is derived from the toughness of its wood, which is comparable to a 'horn', and the Old English word for tree, "beam."





SOWING INSTRUCTIONS

Break the dormancy and increase the likelihood of germination with cold stratification:

- · Soak the seeds in warm water for a 24-48 hour period
- Dry and place your seeds onto a damp paper towel, folding two or three times over to ensure the seeds are covered
 - Put the paper towel and seeds into a zip-lock, and then place into a refrigerator for 14-16 weeks

Once the seeds have broken their dormancy:

- · Fill either fibre pots or a seedling tray with nutrient-rich soil
- Sow the seeds in the container on top of the substrate and cover with 5 mm of compost
- Water the container as soon as you have sown the seeds, continue until the soil is saturated and water begins to drain
 - Place the containers in a warm place that receives a lot of direct sunlight or in a greenhouse. Germination can take up to a couple of months, maybe more but don't give up!

18

REPOTTING

Repot the European Hornbeam every two years in early spring, for the first 10 years. Then repot your tree when necessary, as and when the root system fills the pot. Use a well-draining soil mix.

PRUNING

Pinch out apical buds as soon as they emerge to encourage short internodes. Allow the initial blossom of growth in spring to fully extend and harden off, then hard prune back the new growth. This hard pruning will encourage backbudding and a second flush of shorter, more compact growth for the remainder of the year while ensuring the tree remains vigorous.

Remove large leaves as and when necessary, ideally throughout the growing season. Remove all leaves leaving just one at the tip of each branch in mid-summer.



WATERING

Water the European Hornbeam well in summer, everyday depending on your climate. Water more sparingly in winter. Be sure to avoid letting the soil dry out completely at any time.

FEEDING

Apply feed to your European Hornbeam every week during the first month after leaves appear, then every two weeks until late summer.

CARPINUS BETULUS

Carpinus Betulus has a history of practical uses. Its wood is hard, tough, and durable, making it valuable for woodworking, furniture making, tool handles, and carving. In some regions, it has been used for making musical instruments and barrel hoops.

The small, inconspicuous male and female flowers of these trees are borne on separate trees (dioecious). The male flowers form long catkins, while the female flowers are smaller and less conspicuous.

The fruit of the European Hornbeam is a small, winged nutlet, similar in appearance to the seeds of many other members of the birch family (Betulaceae). These nutlets are contained within clusters of leafy bracts that resemble hop cones.

European Hornbeam is well-suited for creating formal hedges and topiary designs due to its dense growth habit and fine branching structure. It responds well to pruning and shaping. They are often planted as a shade tree in parks, gardens, and urban landscapes. Its dense canopy provides effective shade during the summer months.

Its distinctive fluted bark and ability to thrive in diverse environmental conditions make it a valuable tree species in Europe and beyond. It is not currently listed as a threatened species. However, like many native tree species, it may face habitat loss and challenges due to changing land use and urbanisation.



19

COMMON TERMS

Branching is classification of types of branches. 'Primary' branches are growing from the trunk; 'Secondary' branches are shoots split off from primary branches; and 'Tertiary' branches are the fine branch tips.

<u>Ramification</u> is a structure formed of branches. The optimal arrangement is for branches to be split into two, followed by another two, and another two, and on.

Defoliation is the intentional removal of foliage from a deciduous tree to encourage further growth, increasing ramification and reducing leaf size.

Nodes are the point on the tree where buds, leaves and branches form.

Pinching is a form of pruning done by hand, removing the tender foliage by the fingers and thumb.





YUGEN



/ugenbonsai.cor



customerservice@yugenbonsai.com



ayugenbonsa



yugenbonsai



/yugenbonsai