Saving a sick Satsuki.

Earlier in the year I saw this tree sitting quite alone, sickly and uncared for in a Bonsai garden here in the UK. It is very much a standard looking satsuki, especially for the variety, namely “Gyoten”. They are

often grown in such a fashion, quite tall, with gentle curves and branches on the outside of each curve.
That isn’t to say however that they are not nice trees, the flowers of Gyoten are a favourite of mine, a delicate and frilly pink which is subtle and dainty without being gaudy and over powering. If the flowers are all of the same light hue then it is a superb thing to behold.

So, looking at the tree why buy it? If it is so standard and on the verge of death, why bother?
During my time in Japan I had seen many trees saved from certain death and turned into very healthy, high quality trees within a couple of years. As a fledgling professional, if you can pick up something which nobody else will touch and turn it into gold then it is much easier to pay the bills. Here was such a tree, destined for the bonfire within two years and no chance of anybody buying it, partially because there is a distinct lack of understanding of Satsuki in the UK and there were much healthier trees available for not much more. After some bartering, the price came down and the challenge was on; this times a horticultural challenge rather than anything artistic.

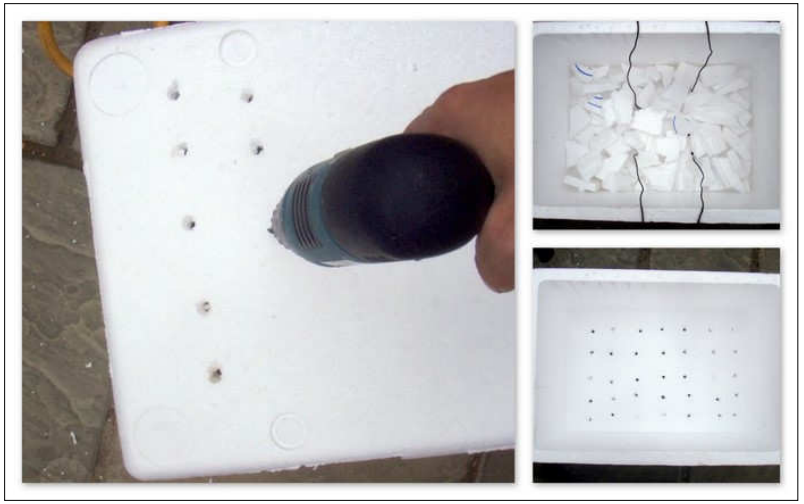
Looking at the branches I could see that the foliage was yellowing and the branches were beginning to die off, so I knew what was wrong with the tree immediately, the roots. It had also suffered some kind of insect damage the year before. The previous year's flowers had not been removed and had turned to seed pods or the branch had simply died. The tree was tired and hanging on for dear life. However, and this is the key thing, at no point on the trunk was there any desiccation. All of the cambial layer of trunk was still intact and functional. Die back is a common problem with satsukis and many varieties are prone to it; thankfully, Gyoten is not one of them. If there had been any patches of desiccated trunk, particularly around the roots and lower trunk then I would have ignored it, said a prayer and then moved on. As it was, the tree was structurally fine, just the tips of the branches and the roots were in a bad state...nothing that cannot be sorted out with a little time and patience.

The first job was to clean out the branches, pruning off everything that was dead or dying. I methodically worked through from top to bottom cutting anything off that was brown, had nothing strong on the end of it. When this tree eventually gets to show condition, none of the original tertiary branches will be remaining so it doesn't matter if they are a little too overgrown or

growing in the wrong direction, just as long as they are healthy and can continue to pull water along the branch. There were many flower buds on the tree and every single one was removed to conserve energy, although most of it had already been wasted in forming the already matured flower buds. As Gyoten is single coloured tree there is no need to worry too much at this stage about differences in flower colours.

Once the branches had been cleaned, it was time to attack the roots. As you can see there were plenty of thick rooted weeds growing in the pot, choking and strangling the tree, taking precious nutrients and generally doing no good. The soil around the nebari was also black and compact, a common problem with satsuki. Many varieties, Gyoten included, will suffocate themselves to death after 5 or 6 years in a pot. The fine hair like roots will matt together and combined with organic fertiliser and broken down Kanuma soil, form a very dense, impenetrable layer which neither water nor oxygen can penetrate. It is therefore very important to repot every three years just as this is starting to happen and prevent potential damage. The repot was very severe, cleaning out all black soil, a thorough root wash and removal of all dirty black soil. This was initially done with a root claw tool but once the soil was a little looser, only a chopstick and water was used. It is important to ensure the surface layer is cleaned and there is an easy passage for water down and through to the core of the root ball.

Once cleaned off, it was ready for the pot. Rather than put it back into a ceramic pot, I chose a polystyrene box which are much more beneficial for sick trees. They retain much more warmth and allow much better aeration and drainage, all of which are essential for healthy root development. The box I had was rather large so after drill many holes in the bottom, I filled it up with broken polystyrene to ensure that bottom of the pot does not stay wet and cold.



A layer of large grain Kanuma is placed on top of this and then a layer of medium. Once this is in place I watered it thoroughly until the water ran clear. Even though the soil was sieved several times, an incredible amount of dust still came out. If it is not washed out immediately then it just begins the clogging up process again. Two steps forward, one and a half back.

The soil, thoroughly washed, was ready to receive the patient. It was tied down using aluminium wires which had been passed through holes in the bottom of the box, however it is not possible to put too much tension in them and tighten it up as you would do in a pot as there is little to stop the wires from cutting through the soil or the polystyrene. Caution must be taken to not allow the tree to move in the pot once it has been planted. It is enough to stop it falling out and keep it still, but never pick the tree up by the trunk!

The repot is finished off by placing prewashed soil into the rest of the box. It is not as important to ensure a tightly packed soil as you would do with an established healthy tree, leaving it aerated and loose is better in this case. Even so, the soil was gently worked into the gaps around the root ball with a chopstick. Grated sphagnum moss is placed lightly around the nebari to keep that area slightly moister and also to ensure that any accidental scars are not left open to desiccate and can heal. Once planted it was thoroughly watered again and then placed in a temporary greenhouse to maintain humidity.

On the picture of the box you can see three marks; the lowest is the level of the broken polystyrene lumps in the bottom, the next is the level of the larger grained soil and the top mark is the soil level. You can see that although the box is large, the actual growing space is quite limited, not much bigger than a pot. It is however incredibly well insulated, well aerated and with superb drainage.

Care for the tree throughout the year was relatively easy. For three months it was kept in the makeshift green house until there were signs of growth. The soil was watered very rarely, but the inside of the greenhouse was sprayed at least once a day until the cover was removed. Once growth had begun and I was certain that there was activity at both ends of the tree I began to fertilise. I used a sprinkling of Growmore, various different nitrogen strength Chempak liquid feeds throughout the year and bi-weekly Maxi-crop drenching. It was placed in the most humid and bright corner of the garden and had tomatoes and beans growing all around it, breathing off large amounts of moisture. I kept a hygrometer near it and it was constantly around the 50% mark in normal conditions. Watering remained quite similar to the initial period, the soil was watered only when it began to show signs of drying out but the foliage was misted daily.

New growth began to pop out quite soon from the terminal growth and the original foliage turned a deep green colour which has remained to this day. Every terminal developed a flower bud around September which was removed as quickly as I could. It has subsequently tried to send out other flower buds from shoots further in and they too have been removed. New shoots are also popping out on old wood further in the tree. I am confident that next year will see a burst of growth and I can begin to plan the future of the tree. It has definitely been saved from ill health, the next is to push it back to full strength and then tart it up ready for a show.

Not that much difference to look at!

But that is the colour we want to see...and new budding. Note that there are no flower buds....they have all been removed.

The initial work was carried out on the 14th May, the follow up photos on 20th November. Updates will follow as work progresses.

Peter Warren.

Training cuttings.

Issue 49 was pretty well all about propagation and aftercare but I did mention that in this issue I would include an article about training young material.

This photograph is of one of David Horton's young trees. I do not know how old this whip is but I would guess it's about 2-3 years old. David is following the traditional Japanese method of training young plants i.e. growing a single trunk to the desired height before shaping. So, when do you start? Do not start in December, January or February. These are the months when the wood is most brittle. The best time for wiring is March or October/November.

The main thing to bear

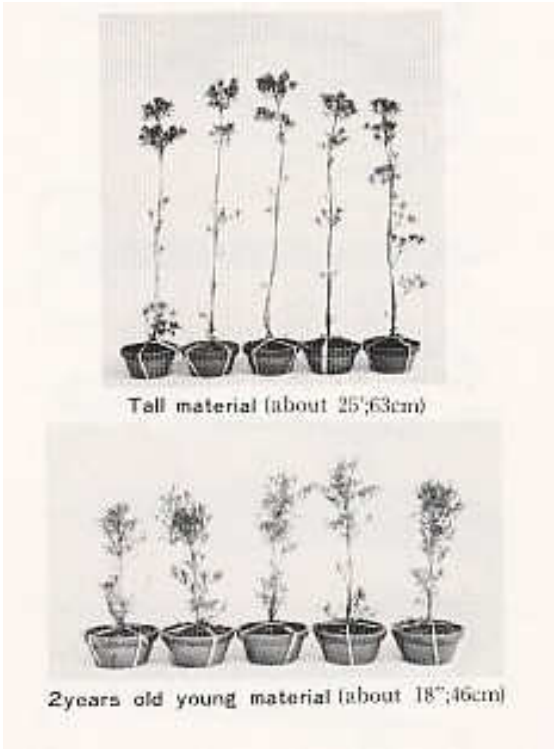
in mind when wiring Satsuki's is that they can be brittle and it is very easy to damage the thin bark. Wiring in spring will require constant vigilance over the following weeks to ensure the wire does not dig into the bark as the tree grows however this is not such a problem with autumn wiring as the growth will be slowing down for winter. The only thing to remember with autumn wired trees though is that they will need protection from frost.

Okay, so we have decided the time of year so the first thing to do is remove all side shoots. Next choose a gauge of wire suitable to the thickness of trunk to be worked. In John Naka's book ***"Bonsai Techniques for Satsuki"*** he recommends using ***"one size larger wire than you might think necessary."*** The reason for this is that if you use a gauge that is not strong enough to hold the shape you require you might end up having to re-wire once or twice more with the resulting possibilities of damage to the bark. Alexander Kennedy on the other hand suggests in his book ***"Floral Treasures of Japan"*** that because the bark is delicate two smaller wires, side by side, would be better than one heavy gauge.

So, we've got our whip and wire but before you start make sure you have an image of the shape you want in mind as you do not want to keep changing the shape as you go. Starting at the bottom, make sure the wire is firmly anchored in the soil. The last thing you want to do is ring bark the trunk with the first turn of the wire! Wiring technique is as per wiring any other variety of tree, not too lose but not too tight and wound up the trunk at roughly 45 degrees. One thing I forgot to mention; when researching this topic I noticed that John Naka suggests that you place the tree in shade for about three days and withhold water prior to work. This will make the trunk more flexible & pliable. Talking of research, although all the written accounts I've found regarding whip training describe the same method as set out above, none explained why so let me hazard a guess. Unlike the vast majority of plants, Satsuki are base dominant. They would prefer to be a small, multi-trunked bush than a single trunked tree. For that reason, if you leave side shoots on the trunk the plant will put all its energy into growing these instead of it apex. 31 years ago when I first read Johns book the significance of this alluded me so I treated my Satsuki cuttings as I would other varieties and used the clip-&-grow method. What I mean by this is, at the start of every growing season pinch out the leader. When two or more shoots emerge later in the season train one as a leader and one as a branch. Don't get me wrong, this method does work but only if you want small bushy trees. By training branches from the start all the plants energy goes into developing these at the detriment of the apex so you get trees with well developed bottoms & weak tops. (Can't believe I said that)

By growing a tall, branchless whip you will get the height you require and can then concentrate on branch development. My only concern with the long whip method is do you end up with a parallel trunk? At least with the clip - & - grow method you do get a nice tapering trunk. Try one or both methods & let me know how you get on.

Photo to the right is from John Naka's book.



Tall material (about 25";63cm)

2years old young material (about 18";46cm)