

Mycelium

A little science, much reduced in detail, from Wikipedia: Mycelium is the vegetative part of a fungus, consisting of a mass of branching filaments. Through the mycelium, a fungus absorbs nutrients from its environment. Mycelium is vital in terrestrial ecosystems for its role in the decomposition of plant material. It increases the efficiency of water and nutrient absorption of most plants and confers resistance to some plant pathogens. A mycorrhizal fungus is one that will establish a mutually beneficial or symbiotic relationship with the root of a tree or plant.

That is, mycelium is a thoroughly good thing for plants. This includes trees, and it includes Bonsai. Possibly the best-known site of mycelium is the root-system of pine trees. Very often (and the more often the better) when repotting your pines, you will see that the root-ball is surrounded by a web of white threads. At this point do not go, "Euw! Fungus!" Rather, you should be saying, "Aah, mycelium."

It is important therefore, when you are repotting your trees, that as far as possible you ensure that mycelium is transferred to the new compost, because it will help the tree to re-establish and to grow more quickly, and more naturally, than any other product or process. You will see the benefit in the growing year to come.

When I am repotting pine trees, especially Scots pine, I make sure to add mycelium to the new compost mix, by blending in a quantity of sieved, rotted pine needles taken from the woods, and as much as possible of the mycelium found on the outgoing root-ball, so to speak. Mycelium is also found in rotting trunks of broadleaf trees, often under the bark. I haven't tried adding it to broadleaf potting compost, but it seems a good idea.

Incidentally, the mycelium is the spreading-out part of a fungus, not the fruiting body. That is, you should not get any mushrooms in your Bonsai pot. If you do, don't eat them. They are good for pine trees, but probably not for humans.

There are commercial products, which you can search on the internet, that are said to introduce beneficial mycelium of mycorrhizal fungus into the roots of all sorts of plants, though not those requiring ericaceous soil. I am going to try one this spring.