

MONTHLY TIPS

(Ed.'s Note: This is the continuation to last month's article by our own Scott Schowalter, originally published in an online forum.)

Bonsai Soil Recipes:

In general, you want to strive for 2 parts inorganics to 1 part organics for a standard soil recipe. You may want to increase the ratio up to 80% or more inorganics for some trees like junipers. By the same token, you may want to increase up to 80% organics for some tropical species. Like I said above, you need to do what works best for you.

The following recipes work well for me in the Cincinnati area. Many members of my club also use similar materials and proportions. If I need better drainage, I just go heavier on the rock.

For conifers: 1 part rock, 1 part surface, 1 part pine soil conditioner.

For deciduous: 1 part rock, 1 part surface, 2 parts organics (usually just pine soil conditioner, but I may substitute some peat for fruiting trees).

For tropicals: 1 part rock, 1 part surface, 1 part pine soil conditioner, 2 parts peat.

Like I said above, soil mixes vary with the local climate, the tree species, and the grower's own needs, abilities, and style. I like my soil to be fast draining so I don't have to worry about sheltering my trees (as of this writing, about 60 of them) from our frequent, heavy rains. I am only able to water once per day at most, usually in the late afternoon/early evening, so the soil must retain enough water to get through the next afternoon. I find that with my water-loving trees, like willows, I cannot skip a single day or I will get major die-back. Those have to be kept in a pan of water.

Here are some other mixes contributed by various members here at BonsaiChat.

From Ryan in Ohio:

“My basic mix has been 2 parts soft akadama to 1 part high fired. This is my general soil for everything. I have found that it works great on everything from ficus and maples to pines and junipers. [I use] 2 parts kanuma to 1 part high fired akadama for azaleas, camelias and gardenias.”

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Also contributed by Ryan:

“Here is a soil mix by Kenji Miyata, a world famous bonsai artist from Japan that is currently working at New England Bonsai.

1 part soft akadama (increased for deciduous)
1 part high-fired akadama
1 part calcined clay (optional/ for water retention)
10% Kanuma”

From a member of Bonsaiweb, sorry, but I forgot who wrote this, or what part of the country in which these are used:

“Standard Bonsai Mix

Components should be screened to produce particles of about 1/4 inch diameter or less. Eliminate dust.

Haydite - 1 part
Granite or River Rock - 1 part
Turface - 1 part
Pine Bark - 1 parts

Shohin & Mame Bonsai Mix

Components should be screened to produce particles of 1/8 inch to 1/4 inch. Eliminate dust.

Haydite - 2 parts
Turface - 1 part
Pine Bark - 1 part.”

From Alvaro in Mexico City:

“My basic mix is 1/3 peat, 1/3 garden soil, 1/6 tezontle sand and 1/6 tezontle gravel (tezontle being a red porous volcanic rock abundant in Mexico). This gives a very fluffy soil that retains moisture well, drains rapidly and leaves a lot of air spaces. It is not very stable as tezontle is quite soft, so after a couple of years it compacts and I have to repot. Adding a bit of peat for azaleas or some grinded bark and pine needles for conifers is easy. I think, however, that most people would think my mix is too fine gritted for their taste.”

From JLDoggett in New Hampshire:

“I use commercial potting soil from miracle grow mixed with rotten (decomposed) granite which I collect locally. self-collected material should be washed well (to remove any dust or very fine particles) and sieved to size (I sieve to 1/16" and 1/8") Proportions of the mix depends on the tree. It drains fast yet remains moist, to test, I moisten it, grab a handful and squeeze it tight, it should feel damp but not soggy and poking the clump should make it fall apart... otherwise it needs more grit. The size of the grit depends on the size of the tree and pot.”

From Johnegert in New Mexico:

“A classic mix for many years was 1/3 sandy loam, 1/3 fir bark humus, and 1/3 decomposed granite.”

“A basic mix will be something like 1/3 sandy loam/soil, 1/3 coarser organic material, and 1/3 inorganic mineral "grit". This mix should be varied according to the needs of individual plants, generally increasing the grit for conifers and increasing the organics for deciduous or broad-leafed material.”

From Michel in Belgium:

"BASIC MIX BODY

For all trees I start off with the same, simple basic mix body, altering it by adding extra's according to the tree species and preferences.

1 Part Lava: Grade 2 (5-15 mm particle size), sieved.
1 Part Split (crushed gravel), sieved

"The lava gets a sturdy and coarse structure, rich mineral content and temporary storing of moist in the granules' cavities. Split even enhances that coarse structure, ensuring for immediate draining, rich silicate presence, and it decreases pores size in between too coarse lava granules. This is mixed to get the basic body of my bonsai soil mixes, and stored for future use.

"It's the additions, measured in the same volume parts, that really change our basic mix body into good bonsai soil:"

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1. ADDITIONS TO 2 PARTS OF MIX BODY FOR BASIC BONSAI SOIL

½ Part Loam

½ Part sphagnum, cocos peat or bog peat

Nowadays, I only use the chopped up sphagnum; it's to ventilate the mix, getting volume and extra moist retention

½ Part pine mulch (pine soil conditioner) For soil improvement, organic content, bacteria life and spore elements

Bone meal (1 teacup to 10 liters of mix body) Very slow releasing, essential organic fertiliser

Blood meal (1 big spoonful to 10 liters of mix body) Fast releasing, essential organic fertiliser

Horn- & Hoof meal (1/2 teacup to 10 liters of mix body) Very slow releasing, essential organic fertiliser

"All of this is added to the mix body to get the basic bonsai soil;"

2. ADDITIONS TO 2 PARTS OF MIX BODY FOR LIMEY BONSAI SOIL

½ Part Loam

½ Part sphagnum or cocos peat. To ventilate the mix, getting volume and extra moist retention

½ Part Maerl, natural lime meal available in Europe, to enhance the lime content

Bentonite (1 liter to 10 liter of mix body) This is basically "stone meal", for structural soil improvement

Bone meal (1 teacup to 10 liters of mix body) Very slow releasing, essential organic fertiliser

Blood meal (1 big spoonful to 10 liters of mix body) Fast releasing, essential organic fertiliser

Horn- & Hoof meal (1/2 teacup to 10 liters of mix body) Very slow releasing, essential organic fertiliser

"All of this is added to the mix body to get the limey bonsai soil;"

3. ADDITIONS TO 2 PARTS OF MIX BODY FOR ACID BONSAI SOIL

2 Parts Kanuma, sieved

The best natural soil acidifier/ acid soil I know of

1 Part chopped up sphagnum, cocos peat or bog peat, to ventilate the mix, getting volume and extra moist retention

1 Part Pine mulch For soil improvement, organic content, bacteria life and spore elements

Blood meal (1 teacup to 10 liters of mix body) Fast releasing, essential organic fertiliser

"All of this is added to the mix body to get the acid bonsai soil;"

Comments:

All of these soil mixes haven proven their value over some years now, and the organic meals (blood, horn & hoof, bone) allow for a first year after repotting without any extra fertiliser.

"All are used without a drainage layer; They are quite coarse and ,therefore, also very free draining: This avoids any risk of root rot in case of excessive and prolonged rainfall, but downside is the necessity for frequent waterings during hot spells."

From a-mused in Rochester, New York:

"If I'm doing a "final" potting, I use an appropriate soil from Hollow Creek Bonsai. They've got some of the very finest soil mixes you'll ever find pre-prepared. My "base" layer is almost always their "Coarse" mix. The main layer is chosen based on the tree. I typically finish the potting with a very thin layer of their "Master's Shohin Soil" for a very clean appearance. Even though most of their soils mixes contain their "Micro Plus" product, I still add an additional amount. The "Micro Plus" is a Mycorrhiza mix.

Where I tend to mix my own is for larger training/growing pots. The actual percentages used vary by species. My list of components include:

Pool filter sand , Turface or a non-clumping, minimally-treated cat litter (that's been tested to ensure it doesn't break down into mush), Screened pine bark mulch , Sphagnum peat, Perlite, Miracle-Gro Moisture Control Potting Mix, Micro Plus (from Hollow Creek)

For percentages, I usually start with the reference table in Naka's Techniques I. Regardless of the mix I'm creating, I always put in the Micro Plus. Additionally, I do sprinkle a little on the tree's roots just prior to potting it up. So far, I've found the soils to remain appropriately moist, with the water distribution being nice and even, and still drain nicely. I'll always put a layer of 3/8" to 3/4" river rock about 1" deep in the bottom of the pot, simply to ensure drainage. The addition of the Mycorrhizae spores, from my experience, helps reduce the transplant shock by helping the tree to establish itself quicker and get a more efficient water/nutrient uptake. I'm also a firm believer in Superthrive, so that's used as well."