What is Perfect Soil?
Successful plantings require a soil structure consisting of approximately 50% solids, 25% pore space for air, and 25% pore space for moisture. While this may be common in undisturbed forest areas, it is not the general rule for homeowners today, whose topsoil has often been stripped away.

Many homeowners have heavy clay soils, which lack adequate pore space for air and can lead to poor drainage, reduced root growth, and greater susceptibility to environmental stress. Others have dry sandy soils, which lack adequate pore space for water and can lead to excessive drainage, as well as a loss of nutrients from the root zone.

What is Soil Perfector?
One application of Espoma Soil Perfector permanently improves the structure of any soil. Soil Perfector is made from a naturally derived, ceramic mineral that is kiln-fired at temperatures in excess of 2000º F. This process creates a durable, lightweight granule containing thousands of tiny storage spaces that hold the perfect balance of water, air and nutrients for an improved soil structure. Unlike other amendments such as peat moss and gypsum, Soil Perfector will not break down or degrade so you do not need to re-apply it year after year.

Directions
Preparing Flower & Vegetable Beds
One 30 lb. bag of Soil Perfector covers up to 12 sq. ft. Spread a 1” layer of Soil Perfector across the entire bed (2” layer for severely compacted soils). Work into the top 6 inches of soil with a shovel, rake or rototiller.

New Individual Plants
Dig a hole at least twice the diameter and slightly less deep than the root ball of the plant. Mix 1 part Soil Perfector to 3 parts removed soil. Follow planting directions and water thoroughly.

Container Gardens
Line the bottom of the container with 2 inches of Soil Perfector. Fill the container with 1 part Soil Perfector to 3 parts potting mix for improved aeration and drainage.

Existing Plants
Using a spading fork around the drip line of the plant, rock and twist the fork to open cracks and crevices as deeply as possible. Fill the cracks with Soil Perfector (Fig. 1). For large trees, dig narrow trenches 18 to 24 inches deep starting between the trunk and the drip line and extending out into the surrounding soil. Dig at least 5 trenches in a wheel spoke pattern. Fill the trenches with Soil Perfector (Fig. 2).
How to Identify Voles

Voles are small mammals that measure between 4-8.5” from head to tail. Often called field mice, these creatures destroy trees, shrubs, and other plants by gnawing on their trunks or eating their root systems.

To check if you have voles look for 1-2” wide burrows and quarter size holes around your plant. Also look for 1/8-3/8” gnaw marks around plant stems that are formed at various angles. Rabbits gnaw marks are much wider, smoother and occur at 45° angles. If your plant is leaning over and drooping, lift its root system from the ground to see if the roots have been eaten. If many of the above symptoms are present, then you probably have voles.

What is Soil Perfector?

Soil Perfector provides a permanent physical barrier to voles. Soil Perfector is made from a naturally derived, ceramic mineral that is kiln-fired at temperatures in excess of 2000º F. This process creates a durable, lightweight, abrasive granule that voles are naturally discouraged to dig through. Soil Perfector is non-toxic and will not physically harm the voles. Furthermore, Soil Perfector will not break down or degrade in the soil so one application is all you ever need.

Directions

New Plantings
Dig a hole 6-8” wider and 1” deeper than root ball. Line bottom of hole with 2” of Soil Perfector. Place plant into hole. Form 3-4” solid band of Soil Perfector around plant. Fill remainder of hole with soil and mulch top with 1/2” layer of Soil Perfector from drip-line to crown.

Existing Plants
Dig a 1’ deep, 3-4” wide trench around plant drip line. Fill trench with Soil Perfector. Replace existing mulch with 2” layer of Soil Perfector from drip line to plant stem.

Planting Bulbs
Dig a hole 2-3 inches deeper than specific depth recommended for bulb. Line the bottom of the hole with 2-3” of Soil Perfector. Set bulb in hole. Fill remainder of hole with a minimum of a 3” lining of Soil Perfector. Backfill the remainder of the hole with a mix of 50% Soil Perfector and 50% previously removed soil.