

WHERE CLAY SOIL'S CONCERNED, BREAKING UP IS HARD TO DO

Posted: Thursday, March 26, 1992 7:00 pm

Nell Lewis, Greensborough

Several gardeners have shared their experience with various soil amendments since that subject was mentioned here last week. And much the same results have been noted in This Garden.

``I use bags of peat moss when I'm working up new beds, and in a year, our red clay has simply eaten the peat moss up,' one gardener complained. ``I simply don't know where it goes.'

``I put all kinds of stuff in my flower beds. Manure, leaf mold, grass clippings, granite dust and anything else I can find,' another gardener said. ``And before I know it, I'm back to that same red clay.' We do have a problem with our red clay which grows lovely roses and wonderful tomatoes, but it can be death for many plants. But something new on our horizon promises to be a long-lasting amendment to all soils, whether clay, sand or loam.

The product is **Isolite CG**, a derivative of diatomaceous earth, fossilized plankton. Mined in Japan, the earth is made into uniform granules and kiln-fired at 1,800 degrees Fahrenheit, much as pottery is made. This creates a natural, super-porous ceramic material that can retain large amounts of water and vital nutrients, according to John Richards of Piedmont Turf Management in Kernersville.

Richards says Isolite, which is approved by the Environmental Protection Agency, is 100 percent natural and contains no chemicals. It is totally safe for the home and the environment.

This product, which is non-toxic, contains no nutrients. Instead, ``each uniform granule has 70 percent pore space made up of 50 percent micro-porosity (capillary or water-holding space) and 50 percent macro-porosity (non-capillary or air-holding space). These pores are continuous and multi-directional, which provides improved water percolation and aeration in heavy soils and allows the plant to retrieve stored water and dissolved nutrients on demand.'

Richards says as far as is known, this material never dissolves. It has the same density as soil and must be incorporated into the soil. Isolate allows water to percolate through the ground, reducing runoff into the water table.

Its real strength, he says, is keeping air and moisture, as well as applied nutrients available to plants.

``Airless soil is dead,' he reminds. ``Compacted soil, where there is no air, is a 'black layer' where nothing grows successfully.'

So far, Isolate is being used mainly on golf courses and in large nurseries and greenhouses. Used worldwide, Richards says that deserts in North Africa are being reclaimed at the rate of 10 acres per year where this material has been used. And it reportedly lowers the temperature of the soil in hot weather.

This product is not yet available in small quantities for use by homeowners locally because it is sold in bulk for golf courses. www.sundineenterprises.com – Sundine Enterprises, 720-363-0548

Richards reports that he placed a Venus flytrap, a difficult plant to maintain, in a dish of **Isolite CG** and added proper nutrients.

``It was amazing how the plant responded to this sterile environment,' he said.

With our erratic weather pattern, and over-used soil, a long-lasting amendment that retains moisture and nutrients and air would be a blessing to gardeners and farmers. Isolite can also be used in potting soil by using one part to four parts of potting soil.

We who are so totally tuned to the earth constantly search for better ways to grow rewarding plants. We stop, look and listen to innovative ideas and suggestions. Some do not ``pan out,' but Isolite appears genuine and much-needed.

We still need to compost leaves, grass clippings and any refuse on our property that is not diseased. Dr. Ed Bailey, the Roseman of Pleasant Garden, is a strong supporter of manual-operated composters that turn these materials into rich earth in weeks to be returned to the soil.

Swisher Mower & Machine Co. of Warrenburg, Mo., advertise both solar-powered and manual-operated models of composters. They sent along a sample of ``rich, nutritious fertilizer' that was made in ``just two weeks.' It looks great.

Man does work with devastating speed, while nature works in her age-old leisurely fashion. I'll just go along with nature.