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gray water irrigation

Posted by <u>Leroy A White</u> Forum List <u>Message List New Topic</u> <u>Leroy A White</u> <u>gray water irrigation</u> November 13, 2012 05:17PM

Registered: 11 years ago Posts: 6

I wish to share observations on tree growth, fruit production and tree health of gray-water-irrigated fruit trees in zone 5 (with heavy clay soils type Wooster and/or Clinton). So-called "gray water" consists of the soapy component of most household's effluent. In our case, the soaps are Tide's *free & gentle* laundry soap (most of the time) and Ivory's bar soap (no phosphate).

Tree varieties inside our gray water drainage system, which consists of a sediment tank, distribution box and 40 ft. of drainage tile with gravel above and below (20 ft. x 20 ft. in area), are:

- 1. Two Red Haven peaches, S.D., four years old.
- 2. Two Crisp apples, STD., four years old.
- 3. One Bartlett pear, STD., four years old.
- 4. One Contender peach, STD., four years old.

Comparison trees outside the drainage area:

- 1. Yellow Delicious apple, STD., four years old.
- 2. Bosch pear, STD., four years old (relocated).

Sizes of trunks (circumference about 1" above graft) – peaches $14-\frac{1}{4}$ " and 16", apples $13-\frac{3}{4}$ ", pear $11-\frac{1}{2}$ " in the drainage area. Those located outside the drainage area are an apple 10" in circumference and a pear at $8-\frac{1}{4}$ ". It appears that all trees inside the gray water drainage area benefit from a constant, underground water source (the roots appear to "find" the water source well beyond the drip line).

Production – With one year's of the "holistic spray regime" applied, a spring freeze and frost killed most fruit tree blossoms and ruined any comparison of last year's huge peach crop. What apples we did produce did not appear to benefit.

Health – The pear tree inside the drainage area experienced a complete black leaf drop, however, it recovered foliage by end of the growing season. On the peaches, one Red Haven showed a 2/3's drop in peach leaf curl.

Chemistry (this is where I really need help) – Our well water tested at approximately at 7.5 pH. At the end of the drainage tile, about 2 ft. below ground, the pH was approximately 7.8 which, considering the soap being added, was expected. I believe that this reservoir of water needs to have a pH in the range of 6.0 to 6.5 in clay soil. With the addition of 2# of Aluminum Sulfate, Anhydrous in a 5 gallon container, my testing will begin to lower the pH.

Are there any questions or suggestions? Are there any others who are looking into this type of fruit production and/or rapid tree growth? For comparison purposes, what circumference are your four year old trees?

Edited 2 time(s). Last edit at 03/18/2013 02:19AM by Michael Phillips. <u>Reply Quote</u> <u>Leroy A White</u> <u>Re: using fulvic acids</u> November 15, 2012 08:19PM

The gray water system as described previously could be an ideal delivery system for certain hydroponic chemicals, namely, the application of fulvic acid into the root zone. Everything I have read about fulvic acid at <u>hydroponics.com</u> gives me "chills" & a WOW! factor. Could this be "The Miracle Molecule" used in a foliar application to replace other recommended components with neem oil? This will be worth testing in the spring.

I'm also intrigued by the higher concentration of fulvic acids offered by <u>www.manicbotanix.com</u>. It appears that a new by-product from black liquor of the wood pulping industry is 80-85% fulvic acid compared to less than 7% fulvic acid in a "leonardite" coal-based product.

Berry Ridge Gardens Zone 5 in Ohio Registered: 11 years ago Posts: 6 Edited 1 time(s). Last edit at 03/02/2013 05:38PM by Michael Phillips. <u>Reply Quote</u> <u>Newer Topic Older Topic</u> <u>Print View RSS</u> Sorry, only registered users may post in this forum.

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