



Tales from the Lab..

“Frequently Asked Questions” – Grey Water and Tri Nature.

- from Brian McLean, Director of Technical Services

Many households, out of necessity or predilection, are keen to divert as much as possible of the water used in their homes, onto their gardens or lawns. We receive many inquiries regarding the effects that Tri Nature products might have if water residues containing them are used in this way.

Tri Nature products do not contain any toxins or compounds that could affect the health of the soil. We consider that all waters containing Tri Nature products at normal, prudent levels are safe for use on gardens and lawns.

The major problems that can occur in the circumstance of using any ‘grey water’ in this way are associated with an increase in soil salinity and/or alkalinity.

The greatest potential for problems is the initial grey water from the wash cycle of a washing machine, or dishwasher. These waters contain high concentrations of alkaline salts.

All laundry and automatic dishwashing powders, including Tri Nature’s, contain high concentrations of these alkaline salts. These are the ‘workhorses’ and most of these salts are based on sodium.

The sodium salts contribute to an increase in alkalinity, salinity and electrolytic strength of the soil onto which they are dispensed.

Thus, if the initial wash waters provide a considerable

contribution to the total watering of the soil, it will be detrimentally affected as alkalinity and/or salinity rise.

Because Tri Nature’s Alpha Plus Laundry and Citrus Dishwashing Powder Concentrates contain no fillers, they do offer a measure of respite for two main reasons.

Firstly, fillers used in normal supermarket products are sodium salts and therefore contribute to both salinity and electrolytic build-up.

In using half the level of powder (as you do with Tri Nature products), the level of sodium and electrolyte is also halved. Depending on the frequency and other wash characteristics, however, this may not be enough.

To be “safe” and ensure the continuing and optimal health of your soil, Tri Nature recommends that water from the wash cycles of washing machines and dishwashers where powdered detergents have been used, be diverted and only rinse waters be dispensed onto soils.

If this is not feasible, we would recommend that the Alpha Plus Laundry Liquid or Gentle Wash Concentrates be used instead of the powders. These products are considerably lower in sodium content and therefore contribute far less sodium or electrolytes to the wash water.

It is all a matter of concentration and balance. There are three main

factors to consider:

1. Poisonous additives: No product that contains an ingredient that is poisonous to plant life should be used. We are safe on that one!
2. Overall concentration: It is important to keep the level of cleaning product as low as possible in any water used for irrigation.

If water containing cleaning products forms a very small proportion of the total water used then any problem should be minimised. Prudent usage is the key here.
3. Chemical balance: In general usage it is common that some buffering or neutralisation occurs, eg Maxim or Excel are acidic and will neutralise the alkalinity of Optimate Or Supré.

The laundry wash and auto dishwasher are the only two household cleaning procedures that might cause any problems for the garden or lawn in a Tri Nature household. With all other products and procedures, prudent use is all that is required.

As a precautionary measure, householders who are keen to recycle their water for irrigation purposes should purchase soil pH test kits available at many nurseries. These will enable easy checks to be made and give an early indication of pH change problems.