

Coconut Husk Preparation

To prepare the husk we first hydrate the bale in two 32 gallon containers at least overnight , and then transfer the hydrated husk and excess water to a second container that has had a large number of holes drilled into the bottom, and about six inches up the sides. After the husk drains, a steady stream of water is washed through until it appears to run clear from the container. Then the husk is again transferred back to the solid container and again covered with water with a few ounces each of Calcium Nitrate and Magnesium Sulfate (Epsom Salts) added at least overnight. The draining and washing procedure is repeated again using pure water, with the final rinse being extensive. At this point measurements have revealed virtually no significant leachable salts and a pH just slightly below neutral. The conditioning with calcium and magnesium is done because of the moderate Cation Exchange Capacity (CEC) of the coconut husk. Sodium (Na) and Potassium (K) ions are strongly bound to the CHC. Laboratory comparative analysis of extracts of coconut husk products using distilled water versus a barium chloride solution demonstrate that as much as 2/3 of the Na and K may not be leached by water alone. What then happens is that you cation exchange calcium and magnesium for sodium and potassium in your early fertilized irrigations, creating possible calcium and magnesium deficiencies and sodium and potassium excesses. If you irrigate heavily as we recommend, the problem is quite temporary and limited. Unfortunately, it seems to be more and more common to hear about people using less extensive irrigation practices, and under these circumstances problems may arise. The addition of calcium and magnesium in the wash stages allows for cation exchange to occur then, creating a more balanced state from the start.

Bob & Lynn Wellenstein
AnTec Laboratory