



**WOOD UTILIZATION PROGRAM
BUSINESS ENVIRONMENTAL PROGRAM
COLLEGE OF BUSINESS
UNIVERSITY OF NEVADA, RENO**

BIOCHAR UTILIZATION INSTRUCTIONS

For use in nursery applications with “supercells”:

The following 3 replications are recommended for initial planting demonstrations:

1. Control: Their typical mix of 5 gallons peat moss + 2.5 gallons perlite + 2.5 gallons vermiculite + 1 cup of Osmocote.
2. 75:25 split: Use this ratio to substitute biochar for peat moss. Using 75% peat moss and 25% biochar. Or, 3.75 gallons of peat moss and 1.25 gallons of biochar. Keep all of the other components constant.
3. 50:50 split: Same as #2, but 50% peat moss and 50% biochar. All other components remain constant.

Other ratios may be substituted but should never approach 50% biochar—50% other ingredients.

For raised bed, vegetable or flower planting from seed or transplanting:

A recommended 1% application rate in a square foot of garden soil, at a tillage depth of 6 inches or so, requires about 1/2 pound of char. Depending on the density of the char, that would convert to about 3 cups/per square foot. Char should be ground to a fine, sawdust-like fraction. Larger pieces and chunks will gradually work their way to the surface, defeating the purpose of the char. (A rolling pin used for baking makes a nice pulverizer.)

When applying the char, adding some inorganic nitrogen fertilizer can offset the initial absorptive activity of the char. As stated, once the mycorrhizal community is established, overall fertilizer needs may diminish.

(These instructions were compiled by and additional information concerning their application can be obtained from Wood Utilization Program Manager Dusty Moller at dmoller@unr.edu ; 702-866-5962. The program's website address is: <http://unrbep.org/resource-conservation/woody-biomass-utilization/>)