Rain Barrel Sanitization for Gardens NOT FOR DRINKING WATER (see CRS website "Resources" for drinking water tips)

Rain barrel users should make sure to clean the barrel with a 3% bleach solution prior to collecting water to irrigate a vegetable garden Household, unscented bleach with a 5-6% chlorine solution can be added at the rate of 1/8 teaspoon per gallon (8 drops). Water in a typical 55-gallon rain barrel should be treated with approximately 1 ounce of bleach. Do not use scented bleach.

Wait approximately 24 hours after the addition of bleach to allow the chlorine to dissipate before using the water. It should be noted that household bleach is not labeled for use in water treatment by the Food and Drug Administration (FDA), although it is frequently recommended for emergency disinfection of drinking water (USEPA, 2006b).

If using bleach is undesirable, you can substitute hydrogen peroxide which acts as a mile antiseptic and comes in a 3% solution (labeled for household use). Use 1 cup per gallon of water, slosh around in the barrel to coat all surfaces, then dump the water and rinse or let air dry. Although 100% biodegradable, this solution is intended to deeply disinfect, and it will harm plants, so be cautious and be sure to wear gloves!

Additionally, a half-gallon of vinegar and a box of baking soda in a barrel ¹/₄ full of water will create a foam mighty enough to clean a barrel. The foam removes any algae or mold that has formed inside the barrel. Just slosh the solution around by rolling the barrel, then rinse and allow to dry prior to refilling.

Hydrogen peroxide can often also be used in place of bleach if you've run out of disinfecting wipes or sanitizing gels. Pour the 3% undiluted hydrogen peroxide into a spray bottle and spray it on the surface to be cleaned, but let it sit on the surface. It's not corrosive like bleach, so it's safe for tools. You can actually pour it over the tools and you don't have to wipe it off. It decomposes into oxygen and water.