## **Organic Does Not Mean Pesticide Free**

**AGRI-VIEWS** 

by Chuck Otte, Geary County Extension Agent

Let me get one thing straight before I launch into this column. I have no issue with organic food or organic food production. Well, maybe one issue and that has to do with misconceptions. Choosing to eat or produce organic food is a personal choice. Be advised that organic food is not healthier or more nutritious. Study after study has shown no difference. Also be advised that any produce, organic or conventionally produced, by law, can not have pesticide residue on or in it.

That is where the general confusion comes in. Many people think organic means pesticide free. But in reality organic is food production according to a strict set of standards. To sell food that is labeled as "organic" you must go through a certification procedure. Each state has a different process and certifying entity. The United States Department of Agriculture (USDA) has certain standards that must be met to be certified organic and whomever is the certifying entity in a state must use these standards as a minimum. A state can have stricter standards, but they can't have lower standards than what the USDA has.

By definition, a pesticide is something that kills an organism or protects a plant/animal from attack by something. Within that broad category you have specific types of pesticides. Insecticides control insects, fungicides protect against diseases, herbicides control plants, rodenticides control rodents, etc. Within the USDA organic certification standards is a list of pesticides, both natural and synthetic, that are approved for organic crop production. There is also a list of "natural" products that are NOT approved for organic production. This list contains things like arsenic, strychnine and tobacco dust, which, while effective at controlling insect pests, are not approved for organic production and are quite toxic to humans.

On the list of approved pesticides are products that are both natural extracts and synthesized versions of natural extracts. Just because they are natural extracts though, doesn't mean that they are "safe". Rotenone is a dust derived from the roots of a tropical legume and has been used for decades. In comparison to some synthesized insecticides, rotenone is just as toxic as the very common garden insecticide Sevin (carbaryl). Naturally derived products often have much shorter periods of being effective requiring re-application much more often than conventionally used insecticides.

There are also organic herbicides, fungicides and bactericides. These all have toxicity classifications just like the conventional versions. All of these products have to have labels regulating usage and post application harvest intervals just like their conventional counterparts. These labels are approved by the Environmental Protection Agency. Many of these organic pesticides are also toxic to bees and other pollinators so caution must be exercised when they are used.

Really, the only way to know that any produce is "pesticide free", is to grow it yourself and never spray it with anything. It also points out that regardless of whether it is labeled organic or not, raw produce always needs to be washed in clean running water before it is used just to be sure! Purchasing organically produced food is a choice that some families decide to make and that's fine. But like with all choices we make, you need to be fully aware of what it means and doesn't mean, before you make it!