BOYSIE E. DAY
Associate Director
Agricultural
Experiment Station

ORGANIC GARDENING
... *right for wrong reasons*

"ORGANIC" GARDENING is riding a new wave of ecology-stimulated popularity. Most popular magazines have run articles about the subject and television has covered it extensively. Treatments of the subject range from minor use of unconventional terminology to describe ordinary gardening practices, to outpourings of pure nonsense. Television programs proclaim the virtues of organically grown produce and denounce as less nutritious or even harmful, food grown with synthetic or "chemical" plant nutrients and pesticides. On a recent program, the television performer held up a head of "chemically grown" broccoli and announced that it was only 20 per cent as nutritious as another seemingly identical head, said to have been grown organically. The organic product was said to taste better and be more healthful than the "synthetic" or "plastic" broccoli.

Organically grown produce is alleged to be superior because of the natural benefits obtained through organic plant nutrients from composts and manures. This is total nonsense. With the exception of a few parasitic plants such as dodder, higher plants do not utilize organic nutrients. Plants require water, carbon dioxide, and a dozen or so inorganic ions and nothing more. Water, air and a few simple salts constitute a complete nutritional environment for green plants and it is immaterial whether these ingredients are supplied from decaying compost or from a mine or factory.

Green plants are "complete" biochemical factories and require no food in the usual sense, only raw materials. Plants grown in water to which nutrient salts have been added are identical in appearance, taste and food value with plants grown in the richest soil. Nutrients derived from decaying organic matter are neither better, nor worse, than nutrients from other sources.

This brings us to the question of why we should mine and manufacture so much new fertilizer rather than more efficiently recycling what we already have in the nutrient pool. Formerly most people lived on the land, fed their livestock and consumed their food on the land and returned the wastes, containing the extracted plant nutrients back to the land. Nowadays processing and consumption of farm products is largely concentrated in and around the big cities of the world. The consumption centers are isolated from the production centers, and although the cities face virtual suffocation in their own mountains of nutrient-rich wastes, it is cheaper to extract or manufacture new nutrients than to recapture those spewed back into the environment by the consumer.

This situation provides a realistic rationale for organic farming; so there is no need to attribute mystical properties to organically grown food. We should strive to complete the loop in the nutrient cycle and recycle as much of our plant nutrients as we can back to the land after each use. For this and many other reasons the obvious and sensible place to put our plant and animal wastes in most instances is back into the soil.

In a sense the advocates of the organic way have been right all along, but for the wrong reasons. There are sufficient good reasons for organic farming, without giving credit or credence to the phony claims made by cultists. For my part, to be right for the wrong reasons is very close to being wrong entirely.