## Get a jump on your garden!

As the weather slowly begins to warm up, many Kansans are eager to get back to gardening. One of the first things you should do every year is a soil test. Most gardeners think soil testing only determines nutrient deficiencies, but the tests also help gardeners understand whether the soil contains adequate nutrients. Basic tests check the soil's pH, and the phosphorus and potassium levels. "Most of the lawn and garden soil tests that come out of our soil-testing lab show more than adequate levels of both phosphorus and potassium," said Kansas State University horticultural expert Cynthia Domenghini. "If those nutrients are not needed, applying them is a waste of money and can be a source of pollution." Domenghini urges gardeners to test their garden's soil before beginning spring gardening, particularly if the soil hasn't been tested in several years. To do so, she says, take a sample from multiple locations in the garden and lawn. Samples should be taken at a depth between the surface and eight inches, depending on the area being sampled. Next, mix the samples together to total one pint of soil. More information on taking an accurate soil test is available online from the K-State Agronomy Soil Analysis. According to Domenghini, the soil sample can then be submitted to your local K-State Research and Extension office to have tests done at the K-State soil-testing laboratory for a fee. "A soil test determines fertility problems, not other conditions that may exist, such as poor drainage, poor soil structure, soil borne diseases or insects, chemical contaminants or damage," Domenghini said. "All of these conditions may reduce plant performance but cannot be evaluated by a soil test." Domenghini recommends submitting dry soil samples, as wet soil has different precautions. "Wet soil samples should be air-dried before being submitted for testing," Domenghini said. "Do not use artificial means of drying such as an oven or microwave as such treatment may result in inaccurate readings of nutrient levels." Soil tests should be used as a tool to identify nutrient deficiencies, Domenghini said, but often they do not tell the whole story of other factors affecting plant growth. Factors that can affect plant growth that are not due to nutrient deficiencies or pH include: Not enough sun, poor soil physical characteristics, walnut trees (walnuts give off a natural herbicide that interferes with the growth of some plants, such as tomatoes), tree roots, shallow soils, improper watering, and overwatering.

Kansas State University horticulture expert Cynthia Domenghini also says work can begin on vegetables like peas and lettuce. "If you are tired of winter and hunger for spring, try planting peas as soon as the soil dries and the temperature reaches 40 degrees Fahrenheit," Domenghini said. There are many varieties to choose from in Kansas. Domenghini suggests early maturing varieties with resistance to powdery mildew. "Early maturing types allow us to harvest a crop before the hot weather arrives and stops production," Domenghini said. She added that plant size should be a consideration when selecting varieties. As for snow peas, commonly used in stir-fry, Domenghini suggests Dwarf Grey Sugar and Mammoth Melting Sugar. Sugar snap peas share a resemblance with shelling peas but have a thick, fleshy pod that can be eaten like snow peas, pod and all. Sugar Bon, Sugar Ann, Super Sugar Snap and Sugar Sprint are recommended by Domenghini. Domenghini said peas should be planted shallow, about one-half inch deep to encourage rapid germination and emergence, and seeds should be spaced 2 inches apart in a row. "Many people plant two rows 6-8 inches apart so the floppy plants can support one another," Domenghini said. "For some older varieties, this may not be enough. They may need trellising to support the growing vines. You might consider installing fence to keep rabbits away." Peas are not the only vegetable that gardeners can begin work on, Domenghini said lettuce can be started from transplants now. "Though lettuce is most often planted directly from seed in late March to early April, it can be started from transplants," Domenghini said. "Transplants allow lettuce to mature earlier so that it escapes heat that can lead to a strong flavor and bitterness." For more information, please feel free to contact the Rawlins County Extension Office.