



SOIL TALKS

SWREC CROPS & SOIL

P and K Management

By: Dr. AJ Foster

Management of phosphorus (P) and potassium (K) is similar to managing the oil in your truck. It doesn't matter if you are driving from Garden City to Los Angeles or from Garden City to Dodge City if you are low on oil, some need to be added to bring the level up to full before you can get the best performance from your truck. If not, the engine can become damaged. If the oil level is full, then the oil is good for the LA trip as for the Dodge City trip. Like oil for the engine of your truck, P and K needs for the growing season are not dependent on how much to be grown, but on whether the amount of P and K in the soil is adequate.

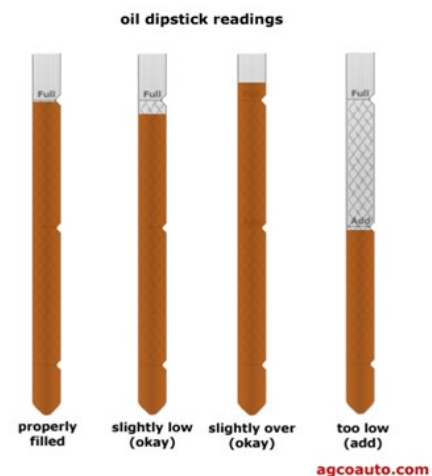
A calibrated soil test is needed to determine if the soil has an adequate amount of P and K for plant growth. The use of a soil test

is similar to the use of your dip stick to check the oil level. When the dip stick is removed, it shows the oil level in the engine, compared to where the oil level should be. If it is not full, you will have some idea of how much to be added. Let say it is slightly low below the full mark, you will be okay and probably will do nothing, but if you are at a service station getting gas, you might add enough oil to get you back to the full mark.

Kansas State University soil test is calibrated to identify the need for P, and K. See publication **MF-2586, for information on understanding Kansas Soil Test Report.**

Adding a full quart of oil when you only need $\frac{1}{2}$ can damage your engine. However, adding excess P and K will not hurt the soil or plant. However, to prevent pollution to a local stream or pond cause from surface runoff and erosion carrying nutrients off-site, excess application of P and K should be avoided.

For additional information or questions related to soil fertility contact Dr. AJ Foster- SW Area Agronomist, Tel. 620-640-1259 or by email: Anserdj@ksu.edu.



Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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