General Summary:

A. **VARIETY SELECTION:** Soybean variety selection remains one of the most important components of successful a soybean production system. Soybean yield varies with variety, location, and environment. One should not compare varieties of different maturity groups because weather conditions during pod and seed development is most responsible for whether a variety yields well or poor. Some years, timing of rainfall favors Group 4s and other years, it favors Group 5s. Let the information contained here help you select varieties that do well in your management system. It is always good to spread your risks. When viewing the variety information, look for plots that are similar to your location and soil type. When looking at overall variety performance, remember that the more locations a variety is in, the more reliable the yield information. Use this information along with Virginia Soybean Variety Evaluation Tests 2006, Virginia Cooperative Extension publication 424-107 to help make variety selections for your operation.

B. **FOLIAR FUNGICIDES:** Soybean fungicide trials have been of interest now for several years. With the onset of soybean rust, producers are trying to stay ahead of the game by experimenting with soybean fungicides. Producers also expect that late season leaf diseases could be affecting yield. Trials most every year have shown that fungicides help keep the crop looking healthy, but an increase in yield does not always occur. Weather conditions will also make a difference in outcome. In most of the plots this year, addition of fungicides did not improve yields.

C. **MATURITY GROUP COMPARISONS:** These tests evaluate Group III varieties and compares Group III vs. Group IV vs. Group V. This was not the year for Group III soybeans in those locations. Weather conditions proved to be detrimental to yields and quality of Group III and early IVs.

D. **OTHER TESTS:** Seed treatments, pelleted poultry litter, various tillage systems, the possibilities of organic soybean production, and effect of sprayer traffic on reproductive-stage soybeans were evaluated. These data are valuable as producers search for new ways to increase yields, lower costs, do their part to decrease dependence on synthetic fertilizers and pesticides and improve water quality.