This release is a brief summary of data for on-farm use of commercial fertilizers, agricultural chemicals, and pest management practices from producers of field corn and organic field corn for the 2010 crop year taken from the estimates published by the National Agricultural Statistics Service in Washington, D.C. These estimates for Pennsylvania and other states are available on the Internet at www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Chemical_Use/.

Information in this report is collected from the 2010 Production Practices and Costs Report of the second phase of the Agricultural Resource Management Survey (ARMS). The primary objective of the survey is to provide data to develop an agricultural chemical use database that is timely, detailed, and reliable. Data collection occurred between October and December of 2010. The agricultural chemical use estimates in this report focus on the acreage treated and application rates for herbicides, insecticides, fungicides, and other pesticides. The survey also collected information about production practices.

Herbicides were applied to 99 percent of the total planted acres of field corn in Pennsylvania. A total of 4,668,000 pounds were applied to that acreage. The active ingredient most commonly used on field corn as a herbicide was Atrazine with a total application of 1,458,000 pounds. It was applied to 86 percent of the planted acreage, with an average of 1 application per year at a rate of 1.243 pounds per acre for each application.

Insecticides were applied to 30 percent of Pennsylvania’s field corn planted acreage. A total of 31,800 pounds was applied. The most commonly used active ingredients for insecticides used on field corn include chlorpyrifos, lambda-cyhalothrin, permethrin, tefluthrin, and terbufos.

Fertilizers consisting of nitrogen content were more commonly used for field corn at 94 percent of the total field corn planted acreage. 109,200,000 pounds of nitrogen were applied total all field corn planted acres, with an average of 1.4 applications per year at a rate of 63 pounds per acre for each application. In contrast, fertilizers consisting of phosphate content were more commonly used for organic field corn at a rate of 37 percent of the total organic field corn planted acreage. The calculated average found was 1.3 applications of phosphate per year at a rate of 8 pounds per acre for each application.