response to acidic deposition. The inventory in this section was limited to those crops of major economic importance among the 34 crops.

The major crops were identified by ranking all of the crops by their 1978 estimated value of production (USDA 1980). Table 8-4 presents this ranking for the entire U.S. and each crop's cumulative percentage of the total. It was found that the top eight accounted for almost 75% of the total value of all U.S. crops.

Of these eight crops, there are research studies on the effects of acidic deposition on the yields of six. There are no effects data on cottonlint and sorghum. Consequently, yield of only the six crops studied is matched with sulphur deposition patterns.

Data on yield of these six crops in the states east of the 100° meridian (38 states) is displayed in Appendix Tables 8-4 to 8-7. The four tables describe yield for the six crops by deposition pattern (i.e., 10-20 kg/ha.yr, 20-40 kg/ha.yr and greater than 40 kg/ha.yr) and total yield. Many states produce some of these crops under all three deposition patterns.

The total yield of each crop under four deposition patterns shows considerable variation (Table 8-5). Soybeans and tobacco are the only crops with any significant proportion of their yield in areas with sulphur deposition greater than 40 kg/ha.yr. For the remainder of the crops, less than 15% of their total yield is grown in areas of high deposition.

Although the aggregate 38-state data show that only 20% or more of the yield of two of the six major crops receives sulphate deposition greater than 40 kg/ha.yr, disaggregated data show that a higher percentage of crops in some states receive a high rate of sulphate deposition (Table 8-6). More than 50% of soybean yield in five states and of tobacco yield in two states receive sulphate deposition greater than 40 kg/ha.yr. In addition, a significant portion of the six crops in some states receive a high rate of deposition. At least 50% of three crops in the states of Arkansas, Kentucky, Michigan, Ohio and Tennessee receives 40 kg SO_4^{2-}/ha.yr.

8.3.2 Canadian Agricultural Resources

Agriculture is an important economic activity for all provinces in eastern Canada with most of the yield and value centred in Ontario and Quebec. Data have been assembled from Statistics Canada and provincial agriculture ministries to provide an overview of the types, yields, and values of crops at risk within each of the three identified deposition regimes. The crops of importance are primarily grains, but data on certain vegetables are also included, although they represent only about 1% of the total value of production.