

Table 8-7 provides a ranking on the basis of production value of all crops included in the inventory. From this table it is clear that grain, corn and hay are most important, accounting for just over 50% of total production value in eastern Canada.

A breakdown of the value and yield for each of these twelve crops by deposition zone are provided in Tables 8-8a and 8-8b, respectively. For many of the crops, more than 50% of their total yield is grown in areas of high sulphate deposition, (over 40 kg/ha.yr). By contrast, very small proportions (4% or less) are grown in areas experiencing only 10 - 20 kg/ha.yr of sulphate deposition. It is evident that a very significant proportion of Canada's agricultural crops are grown in areas experiencing high deposition levels.

In order to obtain a better understanding of the geographical distribution of these crops, Table 8-9 was prepared. This provides a breakdown of production values for each province receiving more than 40 kg/ha.yr sulphate deposition. Appendix Tables 8-12 through 8-14 provide more detail.

Only Ontario and Quebec, which are significant agricultural producers of all crops, have areas exposed to sulphate deposition in excess of 40 kg/ha.yr. The most important crops in these areas (based on value of production), are grain corn, hay and soybeans. In the case of soybeans which is a small crop by volume, 95% of its total volume of production is in the high deposition zone. This is the highest proportion for any single crop, and all of this production takes place in southwestern Ontario.

Overall, the most important crops in terms of value which are grown in areas receiving 20 - 40 kg/ha.yr sulphate are hay, grain corn, potatoes and tobacco. On a provincial basis, hay and grain corn are a greater proportion of total value of production in Ontario and Quebec, where potatoes are an important crop in the Maritime provinces.

It is evident even from this preliminary analysis that a very large proportion of eastern Canada's agricultural yields are grown in areas of high and moderate deposition. In turn, the geographic distribution of crops varies so that certain crops represent a more significant proportion of total value of production in each province. This inventory has provided a preliminary overview of the agricultural resources at risk, particularly in the high and medium deposition zones. Better data on the responses of individual crop species to these deposition regimes will provide the basis for a more accurate quantification of the extent of risk.