Concluding Comments

This report summarizes the major issues and unresolved questions related to the development of pest management strategies, including IPM, in U.S. agriculture. In addition, the report presents recent survey results regarding the extent of adoption of pest management practices by growers of major field crops and selected fruits and vegetables.¹⁴

There have been encouraging advances in methodology in recent years, but a complete, practical, and accepted method to measure overall IPM adoption is not yet available. Despite these measurement difficulties and data comparability problems, some progress has been made on IPM research regarding the factors influencing adoption and the impact of adoption. These issues will be discussed in a later publication as more recent data become available and as the measurement issues become more settled.

The extent of adoption of pest management practices varies widely among field crops and regions. Cotton and potato producers are further ahead on the IPM continuum than producers of other crops. Comparison across crops and regions is complex, however, because different pest classes may dominate depending on crops and regions, calling for different pest management techniques to control them. For example, insects are a major pest class in cotton production, while minimal for soybeans (table 1). Thus, it is not surprising that adoption of insect management techniques is more widespread among cotton producers. As insect management has a wider variety of (nonchemical) techniques than weed control, it is also likely that cotton growers will have a higher overall measure of IPM adoption, which may have contributed to the decline in cotton pesticide use (Fernandez-Cornejo and Jans, 1995). On the other hand, weed control is very important for soybeans and corn. As a consequence, and given the large corn and soybean acreages, it is reasonable to conclude that important future progress in IPM adoption will depend upon weed management efforts.

¹⁴The appendices contain more detailed information on primary target pests by State and crop, the extent of adoption of pest management practices by crop and region, and pesticide use by crop and active ingredient. The survey questionnaire is also included in Appendix IV.