INVESTIGATIONS INTO THE UTILITY OF MESOTRIONE IN MINOR CROPS. Peter C. Forster, Thomas H. Beckett and Michael D. Johnson, Research and Development Scientists and Technical Brand Manager, Syngenta Crop Protection, Greensboro, NC 27419.

Field studies were conducted in 2004 to evaluate mesotrione potential for use in selected minor crops. The purpose of these trials was to evaluate the level of crop tolerance to mesotrione under field conditions. The rates generally evaluated were 70, 105 and 210 gai/ha, applied preemergence and postemergence. Most seeded annual vegetables evaluated were found to be intolerant to mesotrione applications. Sweet potato and horseradish transplants were severely injured. Perennial crops appear to show the most tolerance to mesotrione applications. Cranberries have exhibited excellent tolerance and Section 18's have been approved. A related species, blueberry, has also been found to be very tolerant to mesotrione. Moderate tolerance has been observed on peppermint and flax. Preliminary data suggests that asparagus and okra may have good tolerance, but additional field studies are required. Further evaluation has also been recommended for crops in the berry family, such as *Rubus* (blackberry, raspberry and loganberry), *Ribes* (current and gooseberry), *Sambucus* (elderberry) and *Vaccinium* (lingonberry).