

AN ANALYSIS REGARDING SEVERAL ASPECTS OF WEEDS

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ABSTRACT

Weed issues are expected to grow and become more complicated in contemporary agriculture, as greater focus is placed on high input systems. With increased knowledge of the negative effects of herbicide residues on human health and the evolution of herbicide-resistant weed biotypes, weed research has turned its emphasis to the development of eco-friendly technologies that rely less on herbicides. Furthermore, with the widespread use of herbicide-resistant crops and the uncertainty of climatic optima as a result of climate change, weed science issues have multiplied. To deal with these complex weed issues, a multi-disciplinary strategy is needed, which includes changes to technology, managerial methods, and laws. For creating sustainable weed management methods, more understanding of weed ecology, biology, genetics, and molecular biology is required. Furthermore, judicious use of sophisticated technology, such as site-specific weed management systems and decision support models, will play a key role in lowering weed control costs. In addition, better connections between farmers and weed researchers will be required to promote the adoption of technology advances. To address these difficulties, research objectives must be established, and the weed science education system must be reoriented. Closer cooperation between weed scientists and other disciplines, in particular, may aid in identifying and addressing the complex weed management problems of the twenty-first century. This agreement will allow for more flexible and diversified approaches to creative teaching and training methods, which will be required to educate future weed science graduates to handle the expected weed science problems in modern agriculture. Additional funding for both weed research and weed management education is required to develop this capability.

KEYWORDS: Agriculture, Crop, Herbicides, Science, Weed.

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