

Herbicides Saved Louisiana Sugarcane Production Following Shortages of Laborers for Weeding

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Prior to 1940, a great deal of labor was available for sugarcane production in Louisiana. Johnsongrass and other weeds were held in check by continuous hoeing and digging [1]. Approximately 40 to 70 hours of hand labor were required to weed an acre of sugarcane [2]. Impacts of the Second World War resulted in a shortage of labor for hand weeding with a consequential buildup of johnsongrass infestations. In 1949, at least one-third of the sugarcane acreage of Louisiana was so badly infested that the yield of cane was materially reduced, and one-sixth of the acreage was so thoroughly infested with johnsongrass that sugarcane production was marginal [3]. Reported sugarcane yield losses to johnsongrass were 23-50% [4]. Some fields were so besieged that farmers believed the only recourse was to replace sugarcane with pasture [5].

As herbicide programs were put into practice to control johnsongrass, it was found that nearly all the other grasses and broad leaf weeds were also being eliminated [5]. Herbicide use is one of the factors that led to a significant increase in Louisiana sugarcane yields in the 1950s and '60s (Figure 1). Herbicide use led to increased yields as a result of more effective weed control, which also facilitated higher sugarcane plant populations and increased efficiency of fertilizers [3].

References

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3. Stamper, E.R. 1959. New developments in weed and grass control in sugarcane in Louisiana, *Proceedings American Society of Sugarcane Technologists*. January.
4. Gibbens, R.T. 1955. Control of johnsongrass on circlane properties. *Proceedings American Society of Sugarcane Technologists*. January.
5. Domaanque, D.A. 1955. Practical aspects of extension chemical weed control in Louisiana sugarcane. *Proceedings American Society of Sugarcane Technologists*. January.



Weeds in sugarcane



Spraying herbicide



Herbicide treated sugarcane



Louisiana sugarcane fields



Harvesting sugarcane

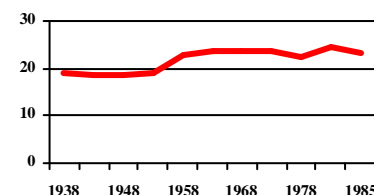


Figure 1: Louisiana Sugarcane Yield (Tons/Acre)