



Research Article

Farmers' Perception and the State of Weeds in Agricultural Fields of Pakistan: A Comprehensive Study of Prevalence and Density

Fatima Kanwal

Department of Environmental Science, Federal Urdu University of Arts, Sciences, and Technology, Karachi, Pakistan.

Received | August 11, 2023; **Accepted** | June 24, 2024; **Published** | July 25, 2024

***Correspondence** | Fatima Kanwal, Department of Environmental Science, Federal Urdu University of Arts, Sciences, and Technology, Karachi, Pakistan; **Email:** fatima.kanwal@fuuast.edu.pk

Citation | Kanwal, F. 2024. Farmers' perception and the state of weeds in agricultural fields of Pakistan: A comprehensive study of prevalence and density. *Sarhad Journal of Agriculture*, 40(3): 841-847.

DOI | <https://dx.doi.org/10.17582/journal.sja/2024/40.3.841.847>

Keywords | Crops weeds, Climate, Agricultural pollution, Karachi weather, Gilgit Pakistan, Alfalfa



Copyright: 2024 by the authors. Licensee ResearchersLinks Ltd, England, UK.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).



a



b



c

Figure 1: (a) *Maize plant (Zea mays L.)*. (b) *Tomatoes (Solanum lycopersicum)*. (c) *Alfalfa (Medicago sativa)*.



Figure 2: Weeds that were identified in the study: (a) Blacknight shade. (b) Dandeliongreen. (c) Goosegrass. (d) Lambsquarters. (e) Golden dodder. (f) Tuber fleece flower. (g) Bitter dock. (h) Curly dock. (i) Goosefoot. (j) Greenamaranth. (k) Field bindweed. (l) Crabgrass. (m) Stinging nettle. (n) Ragweed.



(b) Karkani



(a) Khurpi

Figure 3: Tool use for the removal of weed in Malir district (a) Khurpi and Ghizer district (b) Karkani.



Figure 4: Women uprooting weed in Memon Goth Malir.



(a)



(b)

Figure 5: Technique used for weed management (a) Mulching (straw method). (b) Tillage (manually).



Figure 6: Farmers spraying pesticides without any protection.