



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 11, Issue 5, May 2022

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.118

9940 572 462

6381 907 438

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Common Weeds of Kharif Crops of Bundi District, Rajasthan, India

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ABSTRACT: The weed flora is seen to be quite distinct in the plains, crop fields, irrigated lands, gardens, hills, sandy soils etc. Many unwanted plants come up in the crop fields, called crop weeds. Agriculture weeds occurs in different crops like Kharif and Rabi crops. Kharif crops is known as monsoon crops. The present paper deals with common weeds of Kharif crops of Bundi district, Rajasthan.

KEYWORDS: Angiosperm, Dicot, Kharif crop, Monocot, Monsoon

I. INTRODUCTION

The most common dicot crop weeds are: *Amaranthus viridis* L., *Amaranthus spinosus* L., *Anagallis arvensis* L., *Digera muricata* (L.) Mart., *Argemone mexicana* L., *Celosia argentea* L., *Chenopodium album* L., *Chenopodium murale* L., *Convolvulus arvensis* L., *Encostema axillare* (Poir. ex Lam.) A. Raynal., *Euphorbia hirta* L., *Fumaria indica* (Haussk.) Pug., *Lathyrus aphaca* L., *Launaea aspleniifolia* (Willd.) Hook. f., *Melilotus albus* Medik., *Melilotus indicus* (L.) All., *Phyllanthus fraternus* G. L. Webster., *Phyllanthus maderaspatensis* L., *Sisymbrium irio* L., *Sonchus asper* (L.) Hill., *Evolvulus alsinoides* (L.) L., *Medicago polymorpha* L., *Medicago monantha* (C. A. Mey.) Trautv., *Solanum nigrum* L. and *Rhynchosia minima* (L.) DC.

The most common monocot crop weeds are: *Asphodelus tenuifolius* Cav., *Bulbostylis barbata* (Rottb.) C. B. Clarke., *Cenchrus setigerus* Vahl., *Commelina benghalensis* L., *Cynodon dactylon* (L.) Pers., *Cyperus rotundus* L., *Dinebra retroflexa* (Vahl.) Panzer., *Echinochloa colonum* (L.) Link., *Echinochloa crus-galli* (L.) P. Beauv., *Eragrostis japonica* (Thunb.) Trin., *Eragrostis pilosa* (L.) P. Beauv., *Phalaris minor* Retz., *Polypogon monspeliensis* (L.) Desf., *Cenchrus americanus* (L.) Morrone and *Sorghum halepense* (L.) Pers.

Crops in India are classified into two groups based on the seasons – Rabi and Kharif. Kharif crops are grown during the monsoon season. This word comes from the Arabic language. The most commercial kharif crops of area are Ground nut, Rice, Soyabean, Sugarcane and vegetables like brinjal and tomato. These crops are harvested at the end of the monsoon season and their seeds are planted at the start of the monsoon season. These crops are highly reliant on rainfall patterns. The timing and quantity of rain, along with hot weather, are the main determinants of Kharif crop yield.

Bundi is lies between 24° 59' 11" and 25° 53' 11" N latitudes and 75° 19' 30" and 76° 19' 30" E longitudes. This district is a part of Haroti region, which forms the south - eastern region of Rajasthan state. Bundi district is rich not only in floristic point of view but also in diverse crops and vegetables. A general account of Kharif crop weeds of area is considered in this communication.

II. RELATED WORKS

Important floristic and ecological studies of various part of India have been made by various authors (Mathur, 1960; Vyas, 1967; Agarwal, 1971; Kanodia, and Gupta, 1972; Dadhich, 1974; Bansal and Sen, 1981; Shetty and Singh, 1987-93; Patel, 2001; Singh and Singh, 2002; Pandey, 2009; and Sharma 2017 and 2022). Common Kharif crop weeds of area have been recorded in present enumeration.

III. METHODOLOGY

In the present context rainy season weeds of the agriculture fields of area have been observed. This study is based on field collection and critical observation. To record the relevant information various crop fields of area was visited in

monsoon seasons by author from 2020 to 2021. Herbarium specimen of different weeds were collected and preserved in herbarium chamber, Govt. College Bundi by author. Considerable account of Kharif crop weeds of area is discussed in this communication.

IV. EXPERIMENTAL RESULTS

The group of Kharif or rainy season weeds are associated with various crops grown with the initiation of Monsoon like *Zea mays* (Maize), *Sorghum vulgare* (Jawar), *Pennisetum typhoides* (Bajra), *Oryza sativa* (Paddy), *Arachis hypogaea* (Groundnut), *Gossypium* spp. (Cotton), Pulses like *Vigna radiata*, sugar crop *Saccharum officinarum* (Sugarcane) and many vegetables like *Solanum lycopersicum* (Tomato), *Solanum melongena* (Brinjal) etc. In the beginning of monsoon period, the plants of rainy season appear.

During the rainy season all open places are covered by herbaceous species. The notable dicotyledons herbs, shrubs and climber weeds of this season are: *Senna tora* (L.) Roxb., *Cleome viscosa* L., *Cleome gynandra* L., *Digera muricata* (L.) Mart., *Martynia annua* L., *Indigofera linnaei* Ali, *Indigofera linifolia* (L.f.) Retz., *Withania somnifera* (L.) Dunal., *Coccinia grandis* (L.) Voigt., *Oureta lanata* (L.) Kuntze and *Physalis angulata* L.

Some other common examples of dicot weeds are *Acanthospermum hispidum* DC., *Oureta lanata* (L.) Kuntze, *Oldenlandia corymbosa* L., *Phyllanthus fraternus* G. L. Webster., *Amaranthus hybridus* L., *Amaranthus viridis* L., *Amaranthus spinosus* L., *Trianthema portulacastrum* L., *Digera muricata* (L.) Mart., *Celosia argentea* L., *Leucas aspera* (Willd.) Link., *Pulicaria angustifolia* DC., *Pulicaria undulata* (L.) C. A. Mey etc.

During this season all open places are also covered by herbaceous monocotyledons weeds. The notable herbs, grasses and sedges of this season are: *Urochloa emini* (Mez) Davidse, *Chloris barbata* Swartz., *Dinebra retroflexa* (Vahl.) Panzer., *Dactyloctenium aegyptium* (L.) Willd., *Cynodon dactylon* (L.) Pers., *Cyperus rotundus* L., *Saccharum spontaneum* L., *Sorghum halepense* (L.) Pers., *Echinochloa colonum* (L.) Link., *Eleusine indica* (L.) Gaertn., *Cenchrus americanus* (L.) Morrone etc.

V. CONCLUSION

Crop weeds occur in between the fields and rapidly invading the many crops and vegetables. They classified as Kharif weeds and Rabi weeds. The weed crop association differs for the Kharif and Rabi types though within each of these, at different sites, similar weeds may occur. Present observation forms base-line information about the common weeds of Kharif crops of area.

REFERENCES

1. Agarwal, S. K. (1971). Floristic and Ecological studies on the deciduous forests of Gogunda and Parsad. (South-east Rajasthan). Ph. D. Thesis, Univ. of Udaipur.
2. Bansal, R. P. and Sen, D. N. (1981). Dispersal strategies in plants of the Indian desert. *J. Arid Environ* 4: 3-14.
3. Dadhich, L. K. (1974). Studies on vegetation of Jhamarkotra hills and its neighbourhood, Ph. D. Thesis, University of Udaipur.
4. Kanodia, K. C. and Gupta, R. K. (1972). Common weeds of Kharif crops of western Rajasthan. *Indian J. Weed Sci.* 4 (1): 4-56.
5. Mathur C. M. (1960). Forest types of Rajasthan. *Indian Forester.* 86: 734-739.
6. Pandey, R. P. (2009). Floristic diversity of Ferrargunj forest area in South Andaman *Journal of Economic and Taxonomic Botany* 33: 747-768.
7. Patel, N. K. (2001). Study of angiospermic plants with relation to phytosociological and ethnobotanical study of Danta Taluka (district Banaskantha). Ph. D. Thesis. North Gujarat University, Patan.
8. Sharma, O. P. (2017). Traditional practices of *Ziziphus* Mill in Haroti plateau, Rajasthan. *Int. J. Pure App. Bio. Sci.* 5 (5): 1252 – 1254.
9. Sharma, O. P. (2022). Vegetation and characteristics of different physical regions of Ramgarh Vishdhari wildlife sanctuary, Rajasthan. *IJMTST.* 8(02): 113-115.
10. Shetty, B. V. and V. Singh. (1987-92). *Flora of Rajasthan.* B. S. I. 1: 1-145; 2: 453-860.



11. Singh, N.P. and Singh K.P. (2002). Floristic diversity and conservation strategies in India. In-situ and Ex-situ conservation. Botanical Survey of India, Kolkata.
12. Vyas, L. N. (1967). Contributions to the flora of North East Rajasthan. J. Bombay Nat. Hist. Soc.44: 305-313.



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