

# Role of Mulching in Dryland Agriculture

**Boomika R<sup>1</sup>, B. Bhuvana<sup>1</sup> and N. Indianraj<sup>2</sup>**

UG Scholar, Department of Agronomy<sup>1</sup>

Assistant Professor, Department of Agronomy<sup>2</sup>

Thanthai Roever Institute of Agriculture and Rural Development, Perambalur, Tamil Nadu, India.

bhuvanajm.2003@gmail.com

**Abstract:** *The efficient use of water is crucial factor during crop growth periods which can greatly improve the yield. Soil moisture is the most limiting factor in dryland agriculture. It is lost as evaporation from the soil surfaces and as transpiration from the plant surfaces. Evaporation has to be arrested as it is not directly related to productivity whereas transpiration can be reduced to some extent without affecting the productivity of plants. The evaporation losses can be reduced by applying mulches. The agriculture in dryland can be done with mulching in different ways as stubble mulching, plastic mulching, straw mulching and vertical mulching. Therefore, conservation of soil moisture by using mulching may be an efficient option to save water as well as rising production in dryland farming.*

**Keywords:** Mulching, soil moisture, Dryland and yield

## REFERENCES

- [1]. Billa suresh kumar, Bodha prashanthi and M. Martin Luther (2021) Mulching –A soil and moisture conservation technique. *Agriculture and Environment* :2(1)
- [2]. Lalit kumar and Divya Rajput et al (2021) Mulching as an water saving strategy and way to increase productivity in dryland agriculture. *IJARIE-ISSN (0)-2395-4396*.7(2).
- [3]. Li R et al (2013) Effects on soil temperature, Moisture and Maize yield of cultivation with ridge and furrow mulching in the rainfed area of the Loess plateau, China. *Agricultural Water Management* 16:101-1091
- [4]. Manjeet prem and Prem ranjan et al (2020) Mulching a technique to conserve the soil water and advance the crop production. *Current World Environment*. ISSN : 0973-4929
- [5]. Meryem kuzucu (2021) Importance of mulching in dry agriculture areas for soil moisture storage. *International Journal of Environmental Trends* :5(1),16-27. ISSN -2602-4160
- [6]. Mohammed Abdul Kader, Ashutosh Singha, Milli Amena Begum, Aril Jewel, Hossain Khan and Nazrul Islam Khan (2019) Mulching as water saving technique dry and agriculture. *Bulletin of the National Research Centre*. 43:147
- [7]. Telkar .S.G, A.K. Singh, Kamalkant, Shivendu Pratap Singh Solanki and Deepak Kumar (2017) Types of mulching and their uses for dryland condition. *Biomolecule Report* ISSN:2456-8759
- [8]. Vinod Kumar .S and Upendar .K (2020). A cost effective water saving technique in dryland agriculture – mulching.1(1)
- [9]. Yang N, Sun Z et al (2015) Plastic film mulching for water efficient for agricultural applications and degradable films materials development research. *Material Manufacturing Process* : 37-41.