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*Nagnath Art's Commerce and Science College, Aundha Nagnath Dist – Hingoli*
*Email- pratapnca@gmail.com*

***Address for correspondence:***
*Pratap V Deshmukh, Nagnath Art's Commerce and Science College, Aundha Nagnath Dist – Hingoli*
*Email- pratapnca@gmail.com*

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# Study of Weeds Related With Maize Crop And Their Effect on the Yield of Crop.

**Pratap V. Deshmukh**

## *Abstract*

*Present study deals with the study of weeds and their impact on the maize crop. maize is a staple food of the common people grown in kharib season with some relations such as soyabean, black gram, green gram etc. It is based on cultural practice followed by farmers. This weeds associated with maize result into lower yield. The aim of the present investigation is to record the impact weeds on the yield of maize crop Agriculture is a backbone of Indian economy. India is booned for natural and forest wealth, fertile soil, favourable agroclimatic conditions for growing different varieties of crops and their bumper yield. The Maharashtra State in general and the Marathwada region in particular is however, socially and economically backward, because of illiteracy and lack of curiosity about knowing and adopting modern techniques in the field of cultivation practices and both. Even though "Green Revolution" has taken place since independence. According to the statement given by Dr. M. S. Swaminathan- "Those who have conserved biodiversity tends to remain poor while those who have converted such genetic diversity into commercial product through technology become rich". This statement is absolutely true, and can be applicable to the farmers as well as cultivators of Marathwada region. Because of many factors like irratic nature of rainfall, drought, high temperature, paucity of authentic literature, lack of knowledge of application of package of practices, fertilizers, irrigation, use of insecticides and weedicides. One of the important setbacks of different types of weeds are grown in the crop field.*

*Key Words: Weeds, Maize, Kharib. Practice, Farmers, Green revolution, Drought etc.*

## *Introduction*

*Agriculture is a back bone of Indian economy, India has favorable agricultural condition for growing different verities of crop and their huge yield. Due to increase in population. Demand of food increases, Hence there is need of huge production. Even though "Green Revolution" has started since independence. Due to lack of knowledge of application of package, practice etc. One of the important set back of different types of weeds are grown in the crop field. The farmers because of lack of techniques, use of traditional farming practice of their own and tendency of farmers and cultivators not to follow the advanced practice proposed like Integrated Weed Management Programming. Researcher collect the weeds and to identified them with the help of flora. Hooker (1872,1897,1907) studied Taxonomy of Flora of British India. Cooke (1901-1908) studied Flora of Presidency of Bombay, Gamble and Fisher (1909-1936) Flora of Presidency of Madras, Sedgwick (1919) Trichodesma Indicum , Backer (1949) Amaranthus Genus Crotolora by Naik (1966) and Naik V N (1998 ) Flora of Marathwada.*

## *Material and Methods*

*In present Investigation survey of maize crop in different sessions were accomplished by visiting the field. Present investigation was started in June and continued till the end of September.*

***Selection of Site and land Preparation:*** *The representative site had the medium to black cotton soil. Natural pH of soil was 7.6 and available NPK Kg/ha was 0.26, 23.91 and 896 respectively. The area of field plot was chosen 0.25 hectare, history, crop rotation, land preparation and pH mentioned above. The plots were well prepared during summer 2007 by ploughing, harrowing and cleaning of wastes. The plots selected for the cultivation of crops were experimental (unweeded) and control wherein recommended cultivation practices (RCP) were followed.*

**Sowing methods:** During kharif season the seeds of maize variety CSH-16 were selected, because most of the farmers of this region use this variety, which can withstand in particular soil and natural conditions. So the seeds of these varieties sown in the experimental (unweeded) and control (RCP) plots. The seed rate used was 7.5 kg/ha. Fertilizer doses applied were 25:25:15 NPK kg/ha respectively in both the plots at the time of sowing.

**Intercultural Operation:** Various intercultural operations such as hand weeding, mulcing, spraying of insecticides were followed accordingly in the control plots to remove the weeds and control the pests. Whereas in unweeded plots. The weeds were allowed to emerge and grow.

**Collection of weed from the experimental plots :** During the course of investigation, the frequent visits were given to the control and experimental plots to observe the emergence, growth, flowering fruiting of weeds and impact of these weeds on the yield of the crops.

**Harvesting of Crops. :** The harvesting of sorghum in Kharif (Oct-Nov) is carried out at full maturity by threshing with huller/thresher. The harvesting of these crops were carried out separately in both control (RCP) and experimental (Unweeded) Plots. The yield of experimental plots were compared with those of control plots and experssed in Kg/ha.

$$\text{Weed Index} = \frac{X - Y}{X} \times 100$$

Where

X - Yield from weed free plot.

Y - Yield from the treatment for which weed index is to be calculated.

**Result and Discussion:**

The result presented with statistical analysis of weeds in Table 1. The weeds associated with different crops were found belonging to both dicot (broad leaved) and monocot (grassy leaved).

In maize the high densly of broad-leaved weed species were 08 (22.55 %), medium densed 14 (37.90 %) and low densed were 17 (53.60 %). While grassy weeds were 5 (45.57%), 7 (60.33 %) and 0 (0 %) high, medium and low densed respectively.

This investigation was carried out for a season on the representative soil of medium to black coton soil having natural pH 7.6 and available NPK0.27,350 896 Kg/Hec .

During Kharif season variety CHS -16 for maize were used for sowing. The weed specimens were collected from the fields of Sorghum for preparing dichotomous key and identification and classification.

**Conclusion:**

From the above investigation of weeds it is concluded that, Weeds associated with maize were identified Weeds of various types allowed to grow as such in the maize caused 51.0%, reduction of yield. Recommended cultural practices enhanced the grain yield of maize by reducing considerably.

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**Conflicts of interest**
There are no conflicts of interest.

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