



Effect of Pesticide on food and its use in different crops

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Abstract: Pesticide are the chemical that are being used by the farmers for removing pest, insect and weed. But with the good that these chemicals also harm our environment and in result us. This study is focused to found relation between the opinion of farmers about pesticide and the use of pesticide. It is observed that most farmers have negative impression of pesticide but irrespective of that the use of pesticide is still very high.

Key Words: Pesticide, chemical, farmers, environment, result, focused, relation, opinion, negative.

India is an Agriculture based country as more than 60 percent of India's population lives in rural area and dependent on agriculture for their livelihood. There are 329-million-hectare land in India and net cropped area is about 142.5-million-hectare. Agriculture sector contributes 17 to 18 percentage in national Gross Domestic Product (GDP). There are total 118.7 million farmers reported (census 2011) in India. For Better production they need better resources like healthy land, water, good seed fertilizer, equipment and chemicals. Chemical plays important role in protecting crop from insect, disease and weeds called pesticide. Pesticide are divided into three types according to their use

- i. Insecticide: For killing insects
- ii. Fungicide: For disease and pest control
- iii. Herbicide or weedicide: For removing weeds from crop

These chemicals are more or less harmful for human and environment. Farmers use them to protect their crop and increase yield. They used broadcasting for spraying methods for applying these chemicals. These chemical kills insects, weed and pest but at same time it gets into water and soil around the field, and also into the crop for which it is used. According to environment protection agencies, these chemicals are harmful for human being because they are having poisonous material in it so its residue effect food and we eat this effected

food it can affect our health. Government always monitor the dose and residual effect of crop but they still found in our food chain. Pesticides may have acute and chronic health effect, depending on quantity and ways in which a person is exposed. It is shown in various studies that insects and pest develop immunity system against pesticide so farmers have to use higher potential pesticide to kill them, although pesticide is toxic to humans and put adverse effect all over the body.

Pesticides are broadly classified into three classes according to their effect on human first is carcinogenic (causing cancers) second is neurotoxic (causing brain damage), third is teratogenic (damage to foetus). Limits was established by food and agriculture organization (U.S.) and world health organisation (WHO) in 1963 as Maximum residue limits (MRLs) acceptable daily intake (ADI). Pesticide residue refers to the pesticides that may remain in food after they are applied on food crops.

There are more than 1000 pesticides used in whole world. Dichloro Diphenyl Trichloroethane (DDT) and lindane can remain for years in soil and water, are banned since 2001, but they are still in use in some areas.

Methods- Total 100 farmers, who are growing wheat, paddy, oil seeds, pulses and vegetables in their fields, were selected by purposive sampling technique from Deoria sadar block of the



Deoria District which is purposely selected for this study. Data were collected directly from farmers through a specially designed from farmers through a specially designed and pre tested interview schedule of close ended questions. Schedule was divided into two parts one is to find out their opinion about affect of pesticide in food and second is for the use of pesticide in different crops. Data were tabulated and we tried to see the relation between the opinion and use of the pesticide by the farmers.

Objective- To find out relation between effect of pesticide in food and their use in different crops

Hypothesis- There is no relation between knowledge of effect of pesticide and their use
Result-

Table No -1
Farmer opinion about effect of pesticide on food and health

S.No	Opinion	Percentage
1	Negative (harmful effect)	87.50
2	Positive (Good effect)	00.25
3	No effect	12.25

Out of 100 farmers 87.50 percent farmers were agree on harmful effect of pesticides on food and health and 0.25 percent farmer said pesticide is good for food and heath according to rest farmers there is no effect of pesticide in food and health.

Table No - 2
Use of Pesticide in different crops

S.No	Name of crop	Percentage if farmers using pesticide
1	Wheat	40
2	Paddy	25
3	Pulse crops	20
4	Oil Seeds	30
5	Vegetable	70

Out of 100 farmers 40 percent are using pesticide in wheat, 25 percent are using in paddy,

20 percent are using pulse crops and around 70 percent farmers are using pesticide in vegetable.

Discussion- From the observed data we can see that most of farmers are informed about the probable negative effect of pesticide. Even though most of the farmers are using pesticide for their crops. Through the results observed we can say that farmers are using the pesticide according to crop's need. As vegetable is prone to insects and disease, pesticide use is very high in vegetables. Also, vegetable is their cash crop, they don't want to take risk.

REFERENCES

1. A.A. baikar and K.V. Naik(2016),Efficiency of insecticides against fruit borer helicoverpaarmigera (HUBNER) infesting chilli under laboratory condition, Plant archivers vol 16 Nov-2, pp 890-892
2. V. Kavitha and K. Chandran(2017),Is organic farming an alternative on Indian Intensive farming, , Plant archivers vol 17 Nov-2,1447-1452
3. Arun Kumar Khajuria, N.S. Bisht and Ram Krishna(2017),Effect of 24-D and Linius on Callus Induction in Different explants of Viola Cancsens wall Ex RoxB, Plant archivers vol 17 Nov-2, pp 833-838
4. Ankita Gupta(2015), BhojyaPadarthon par keetnashak ka prabhav-Laghu Shodh Prabandh, DinaNaath Pandey Mahila P.G. College, Deoria
5. <http://www.quora.com>
6. <https://www.linstrong.com>
7. <https://www.who.int>
8. <https://chemicalsinourlinc.echa>
