

## **Project for Production of Pesticide free Basmati and Strengthening of Export during the year 2021-22**

### **Introduction**

Basmati Crop is a natural and heritage produce of Punjab State having a unique and distinct aroma, taste and flavor. The crop requires special weather condition, which are prevalent in northern part of the Country including Punjab and some parts of Haryana and U.P, Uttrakhand and Jammu. India is the largest exporter of basmati rice in the world with an estimated value of 27000 Crores with majority components going to Europe, Arab world and USA. Punjab contributes about 40% of the exports and has emerged as the dominant producer in the Country.

The area, yield, production and production in grains of basmati in the state for the last five years is as under:-

<b>Year</b>	<b>Area (Lakh Ha.)</b>	<b>Yield (Kg ha<sup>-1</sup>)</b>	<b>Production (LMT)</b>
2016-17	5.02	4165	20.91
2017-18	5.46	4595	25.09
2018-19	5.11	4321	22.08
2019-20	6.29	4321	27.18
2020-21(E)	4.06	4369	17.75

After paddy, basmati crop is the second largest crop of kharif season in Punjab. Being a low water consumptive crop and its ability to fit in crop diversification programme, basmati is considered as an alternative crop to paddy. This crop is a non-MSP crop, so it is not procured by the Government agencies and its sale is totally dependent upon the private traders. Hence, its market rates are fluctuating every year, even within the season also. Therefore, there is large scope in increase in its area as well as production. Although it is grown in all parts of the State, but major producing districts are Gurdaspur, Amritsar, Tarntarn, Ferozepur, Fazilka, Sri Muktsar Sahib and Sangrur.

In the last few years, the exports have encountered problems with regard to export of basmati since the pre-shipment requirements for pesticides used in basmati rice have been fixed at MRL values of less than 0.01 ppm, which is

actually the level of detection for those pesticides. Alarmed at the rejection of consignments of basmati rice by USA, European Union in the year 2017-18, the department of Agriculture & Farmers Welfare, during 2018-19, embarked upon Awareness campaign amongst farmers about the ill-effects associated with the use of five pesticides viz. **Acephate, Thiamethoxam, Carbendazim, Traizophos, Tricyclazole** (residue threshold for export of these pesticides was 0.01 ppm) on Basmati Crop.

Such concerted efforts to drive home the message of pesticides free basmati were further continued into the following year i.e. 2019-20 and major pesticide companies were also made part of this Campaign. In total, nine pesticides were identified with the help of Agricultural Processed Food and Export Development Authority (APEDA). The Government and other stakeholders in a complete synergy had organized a massive awareness programme throughout the State starting from June onwards with large number of Workshops and Camps.

### **Prohibition of Pesticides Order 2020**

Taking a leap forward, during the kharif of 2020, Government of Punjab vide its Notification No. S.O. 26/C.A.46/1968/S.27/2020 dated 14.08.2020 prohibited the sale, stock, distribution and use of the nine pesticides viz **Acephate, Triazophos, Thiamethoxam, Carbendazim, Tricyclazole, Buprofezin, Carbofuron, Propiconazole and Thiophinate Methyl** for 60 days on Paddy Crop including Basmati. It was mandatory for the dealer to mention name of crop (other than rice/basmati) on the purchase bill for which the said pesticide was sold.

### **Programme for Kharif 2021**

Due to concerted efforts of the Department done in the last few years, Basmati rice has fetched better prices in national and international markets and is able to maintain good reputation for its rich aroma and cultural heritage. It is pertinent to mention that the basmati does not has any price support of the Government.

After successful implementing the campaign for producing pesticide free basmati during last three years, the department has planned to continue its

efforts in collaboration with major pesticides companies and export associations. A meeting has already been conducted by Director Agriculture, Punjab on 29.06.2021 with all Chief Agricultural Officers of the Punjab State including the representatives of various stake holders. The programme for ensuing basmati season has been finalized and circulated in all the field offices. In order to bring efficiency in resource allocation and enhance operational performance of the programme, the districts have been divided into clusters for collaborative engagement with pesticide Companies and Associations. The allocation of clusters is enclosed as **Annexure-I**.

The State Agricultural University has revised the package of practices to be followed for production of basmati rice including identification and promotion of substitutes of Tricyclazole. As per the recommendation of the university, the department does not recommends or promotes the use of Tricyclazole on basmati crop. There is availability of safer alternative pesticides in the market, the uses of which shall be promoted through awareness programme in the ensuing season. Keeping this in mind, basmati pamphlet has been finalized in consultation with PAU and supplied to all stake holders for effective distribution to farmers and dealers premises. Apart from this, a basmati calendar consisting of diseases wise recommended pesticides and other control measures has been prepared and supplied to all stake holders. The district wise and block wise plan shall also be finalized in synergetic collaboration with various association and pesticide industries. The report regarding the sensitization of farmers will be collected on a weekly basis. The brief action plan is listed below:

- a) **Sensitization of farmers for development of basmati crop through Farmers Training Camps:-** There is a great potential to promote basmati in terms of increase in their area as well as produce pesticide free crop to compete in the export trade. Farmers will also be educated to shift area from paddy to basmati being a less consuming water and consequently in step to save underground water. For this purpose, it is planned that three farmers training camps will be organized each in July, August and September for every village of major basmati producing areas. Similar training camps shall also be organized at block level and one sensitization program will be organized at district level for

dealers/aartiyas. All this will be achieved through collaborative engagement with pesticide Companies and Associations.

- b) **Crop monitoring**:- For monitoring the crop pests, regular meetings will be held in the field along with scientists from PAU. For publicity advertisement through newspapers, TV clips on doordarshan; and extension workers and scientists meet will also be conducted.
- c) **Latest packages of practices (Literature)**:-
- (i) One Page Pamphlet: PAU will prepare one page pamphlet giving important hints for the successful cultivation of the basmati, which will be distributed to the farmers during training camps and kisan-melas etc.
  - (ii) Basmti Calendar: PAU will prepare a calendar for effective management based upon economic threshold level of various pests. This calendar will be displayed at pesticide dealers shop in basmati growing areas for the information of the farmers.
- d) **Demonstrations for Promotion of Integrated Pest Management (IPM)** :
- For careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment, IPM will be promoted through conducting demonstrations. For this purpose, one demonstration is planned to be conducted for a block of 10-15 villages.
- e) As for as the supply chain of good quality seeds of basmati rice is concerned, the department has already requested seed producing agencies for provisioning of the same for timely distribution across the various districts of the State.