



## Study of Hybrid Rice in India –Current Status, Economics and Future Prospects

<sup>1</sup>Priyanka Verma, <sup>2</sup>Daksha Kaushik <sup>3</sup>Dr. Anju Pal

<sup>1,2</sup>Research Scholar, <sup>1,2</sup>Research Scholar, Mewar University, Chhitorgarh

<sup>3</sup>Assistant Professor , Department of Horticulture, GBP Univ. of Agri. and Tech., Uttarakhand

### Introduction:

Rice is staple food of more than 60 % of Indian population. It accounts for about 43 % of total food grain production and 46 % of total cereal production in the country. In order to meet the domestic demand of the



© IJRPS International Journal for Research Publication & Seminar

increasing population the present day production of 99 million tons (2008) of milled rice has to be increased to 125 million tons by the year 2030. Since the yield of high yielding varieties (HYVs) of rice is plateauing, it is rather difficult to achieve this target with the present day inbred varieties. Therefore, to sustain the self sufficiency in rice, additional production of 1.5 million tons is needed every year. Among the limited options, hybrid technology is the only proven technology currently available for stepping up rice production significantly. The rice hybrids, recently introduced in cultivation, on an average, give 10 to 15 q/ha additional yield over the conventional varieties (about 20 % increase). Therefore, the introduction of hybrids and popularization of their production technology are feasible and readily adoptable to achieve targeted production.

### What is hybrid rice?

Like in other crops, the first generation progeny (F1) obtained by crossing two genetically different varieties (parents) of rice is called 'Hybrid'. Since rice is self-pollinated, cytoplasmic male sterile (CMS) parent is used as female parent, which is normally called 'A' line. The fertility restoring line which is called 'pollinator' to the female parent is known as male parent. It is generally referred to as 'R' line, and is used for hybrid seed production.

**Note :**For Complete paper/article please contact us [info@jrps.in](mailto:info@jrps.in)

Please don't forget to mention reference number , volume number, issue number, name of the authors and title of the paper