INTRODUCTION
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Rice (*Oryza sativa* L.) is one of the most important cereal crops and it belongs to the family Poaceae. It is the staple food crop for 70 per cent of the world's population. The edible form of rice includes rice flakes, puffed rice, rice wafers and canned rice. It is also used in starch and brewing industries. The byproduct of rice milling i.e., husk and bran are used for cattle and poultry feed. Straw is good cattle feed and also used for making hats, mats and ropes.

Rice has the world's largest area under cultivation covering an area of 153.51 million hectares with a production of 614.85 million tons with a production of 4.00 tons/ha (Anon., 2005). Rice occupied a total area up to 37 per cent under food grains production in the world's and it stands First place and next cereal crop is wheat. Rice growing areas are South East Asia, West Africa and Central and South America. Rice is one of the important staple food crops in India and it stands first in area and second with regard to production. In India, it occupies an area of 45.00 million ha with a production of 87 million tons and productivity per hectares is 3-4tons/ha (Anon., 2006). Rice is grown throughout India in all the states. The major rice growing states are West Bengal, Bihar, Madhya Pradesh, Orissa, Andhra Pradesh, Karnataka, Tamil Nadu and Uttar Pradesh. In Karnataka, rice occupies an area of 1.42 million hectares with a production of 3.60million tons and the productivity of 2.53 tons/ha (Prabhakara shetty et al., 2005).

Rice crop is affected by many diseases caused by fungi, bacteria, viruses, phytoplasmas, nematodes and other non-parasitic disorders. Among the
fungal pathogens, *Pyricularia oryzae* Cav. causing rice blast [*Exerohilum oryzae* (Van Breda de Haan.) Subram. and Jain] Causing brown spot and *Rhizoctonia solani* Kuhn. Causing sheath blight are season pathogens and destructive. *P.oryzae* is referred to as *Pyricularia grisea* (Cook) Sacc. Throughout the text as most reports use the later nomenclature. The blast is caused by *Pyricularia grisea* Sac. is the most important fungal disease on rice. The pathogen is known to attack paddy crop at various stages viz., seedling, tillering and panicle emergence stages and causes symptoms of infection in leaf, sheath, stem, neck, panicles and discoloured grains Ear heads or individuals grains become chaffy which finally affect the yield of the crop (Padmanabhan, 1974). Blast is generally considered as the major disease of rice; because of its wide spread distribution and its destructiveness under favourable conditions. The International Mycological Institute has recorded its presence from 85 countries throughout the world (Ou, 1985).

The disease is adaptable to adverse environmental conditions of widely fluctuating temperatures and relative humidity. It appears in irrigated low land or rain fed upland rice as well as in submerged or deep water rice (Anon., 1963). Blast causes heavy losses in yield that vary from place to place. Between 1980 and 1987, seven epidemics of blast have occurred in four states viz., Himachal Pradesh, Andhra Pradesh Tamil Nadu and Haryana, causing heavy losses (Nagarajan, 1988).

The blast pathogen, *Pyricularia grisea* attack to the various plant parts viz., leaf, nodal regions, neck, panicles and grain discoloration. Due to severe infection of the pathogen the leaves becomes dried and appear to burnt appearance in nursery and also in main field. The pathogen also infect neck and panicles during maturity stage of
the crop resulting chaffiness of the panicles and discoloration of grain resulting reduction in the yield of paddy.(Goto, 1965).

Over the world, blast is the most important disease of rice. In India this disease is known to cause on an average of 30 per cent loss every year. The Coorg district receives heavy rainfall during cropping period and the crop is most susceptible to blast disease and also breakdown of resistance within short period. At present, there are no resistant varieties among cultivating paddy in this district. The present investigations would be undertaken in Coorg district for management blast disease by various methods viz., screening of germplasms, chemical and non-chemical methods along with epidemiological factors would be studied in order to reduce the blast disease in field conditions and save the crop. Hence, the research work would be taken in Coorg district for the management of blast disease with the following objectives:

* To identify the rice germplasms for resistance against blast disease

* To study the epidemiology of rice blast disease

* To evaluate fungicides efficacy for blast disease management

* To evaluate botanicals against blast disease management

* To develop the integrated disease management strategies for blast disease