

Effect of different chemicals and antibiotics on  
bacterial leaf blight (*Xanthomonas oryzae* pv. *oryzae*) of  
rice

**Tasleem-uz-Zaman Khan, Saleem Il Yasin, Muhammad Ayub, Javed Anwar  
Shah & Mushtaq Ahmad**

*Rice Research Institute, Kala Shah Kaku, Lahore, Pakistan*

**Abstract**

Four fungicides (kasuran, kasumin, copper oxychloride & vitigran blue) and three antibiotics (oxytetracycline, streptomycin & chloramphenicol) were tested as foliar spray for their effect on bacterial leaf blight, under artificial inoculated conditions, for three years. Among the test chemicals (fungicides and antibiotics), copper oxychloride performed the best followed by vitigran blue with 43.25 and 48.19% disease incidence against control (71.08%) causing 39.15 and 32.20% disease reduction respectively. None of the antibiotic treatments in combination with copper oxychloride performed better than the individual applications of the either treatments. Streptomycin exhibited moderate efficacy against the disease whereas all other test treatments, alone or in combination, were least effective against the disease. The highest paddy yield among the test treatments was recorded in copper oxychloride (3.63 t ha<sup>-1</sup>) followed by vitigran blue, kasumin, streptomycin, oxytetracycline, chloramphenicol, copper oxychloride + streptomycin yielding 3.58, 3.58, 3.57, 3.57, 3.55, 3.55 t ha<sup>-1</sup> respectively against 3.32 t ha<sup>-1</sup> paddy yield in the control.

**Keywords:** Bacterial leaf blight, *Xanthomonas oryzae* pv. *oryzae*, chemicals, antibiotics.