## EVALUATION OF SEVEN RICE GENOTYPES FOR RESISTANCE TO FALSE SMUT (Ustilaginoidea virens (COOKET) Tak.) UNDER UPLAND CONDITION IN OVBIOWUN-EMAL, EDO STATE, NIGERIA

## M.O. AHONSI<sup>1\*</sup>, A.A. ADEOTI<sup>1</sup> AND B.N. SINGH<sup>2</sup>

<sup>1</sup>Department of Crop Protection, Institute for Agricultural Research, Samaru, P.M.B. 1044, Ahmadu Bello University, Zaria

<sup>2</sup>West Africa Rice-Development Association, c/o International Institute of Tropical Agriculture (IITA), P.M.B. 5320, Ibadan, Nigeria.

\*Present Address: IITA, P.M.B. 5320, Ibadan (E-mail: m.ahonsi@cgiar.org) Address for correspondence: Dr. A.A. Adeoti, AMREC, University of Agriculture, Abeokuta, Nigeria. E-mail Otiade@unaab.edu.ng

## ABSTRACT

Seven rice genotypes were screened against false smut under rain fed upland field conditions at two farm sites on the outskirts of Ovbiowun-Emai (longitude 6<sup>o</sup> 23<sup>i</sup> E and latitude 6<sup>o</sup> 55<sup>i</sup> N) in 1993 wet season. Incidence or severity of false smut, and grain yield varied among rice genotypes, and was not affected with rice genotype by site interaction, though the disease was significantly higher at site 2, compared with site 1. Out of the seven rice genotypes screened, IRAT 170, and Ex-China were highly resistant (completely disease-free), and resistant (disease severity score < 1% to false smut, respectively. Rice genotype ITA 316 was moderately resistant (disease severity score < 5%) to false smut. Genotype ITA 150 was susceptible, while ITA 315, ITA 335, and FARO 3 were highly susceptible with disease severity scores > 20%. Results of this study suggest that rice genotypes IRAT 170 and Exchina may be promising genotypes for resistance to false smut, and would therefore be important in breeding programmes aimed at evolving resistant high yielding cultivars. Screening of more rice genotypes against the disease may also be worthwhile.

**Keywords:** False smut; *Ustilaginoidea virens*; upland rice; varietal resistance; flowering time.