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FITNESS OF MUTANT ISOLATES OF *Magnaporthe oryzae* RESISTANT TO AZOXYSTROBIN (G143A) COLLECTED IN RICE FIELDS IN BRAZIL/Adaptação de isolados mutantes (G143A) de *Magnaporthe oryzae* coletados em lavouras de arroz do Brasil. LEILANE SILVEIRA D'ÁVILA¹, MARTA CRISTINA CORSI DE FILIPPI², ADALBERTO CORRÊA CAFÉ FILHO¹.¹Instituto de Biologia, Departamento de Fitopatologia, Universidade de Brasília, Brasília, DF/ ²Embrapa Arroz & Feijão, Santo Antônio de Goiás, GO. E-mail: silveiraleilane@gmail.com

The dynamic of competition among isolates resistant and sensitive to fungicides determines, by and large, if resistance becomes established in a given pathogen population. Whether there is loss of fitness in G143A field mutants of *Magnaporthe oryzae* is not known. The objective of this work was to characterize isolates of *M.oryzae* resistant to strobirulins (QoI fungicides) carrying the G143A mutation, as to their adaptability. The DNA of 98 isolates was extracted, the cytochrome b region amplified and digested with Styl and Fnu4HI restriction enzymes, in order to detect isolates carrying mutation of F129L and G143A genes, respectively. Eight representative isolates were characterized as to their aggressiveness to rice plants and epidemiological parameters were determined (production of inoculum, latent period, lesion size and intensity of sporulation). For these assays, mutants were compared with wild type isolate guy11. All isolates grew in PDA supplemented with azoxystrobin ($10\mu\text{g.mL}^{-1}$), the relative growth varied from 38.4 to 94.4%. In the spore germination assay, all isolates germinated at an azoxystrobin dose $10\mu\text{g.mL}^{-1}$, albeit with different levels of germination impairment, depending on the isolate (from 28.5 to 65.4%). So far, we have detected 12 isolates carrying the G 143A mutation. Different patterns of aggressiveness were observed (mean blast severity varied from 2.4 to 25.8%); inoculum production varied significantly, from 1×10^2 to 3×10^6 conídios.mL⁻¹; lesion size and lesion sporulation varied among isolates. In contrast, no differences in the latent period were detected among isolates. Presence of resistant response mutation to QoI fungicides appears to be linked to a loss of adaptability of given *M. oryzae* isolates, since most mutants presented a reduction in aggressiveness, as well as a reduced adaptability compared to the wild type.

Key words: *Oryza sativa*; Fungicide; Competitive.