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INCIDENCE OF *Fusarium* SPECIES COMPLEXES AND MYCOTOXINS IN BRAZILIAN RICE¹ / Incidência de complexos de espécies de *Fusarium* e micotoxinas em arroz no Brasil. G. M. MOREIRA²; C. P. NICOLLI³; L. B. GOMES³; E. B. FURLONG⁴; L. H. PFENNING³; E. M. DEL PONTE². ²Departamento de Fitopatologia, Universidade Federal de Viçosa, 36570-900, Viçosa, MG, Brazil / ³Departamento de Fitopatologia, Universidade Federal de Lavras, 37200-000, Lavras, MG, Brazil / ⁴Escola de Química e Alimentos, Universidade Federal do Rio Grande, PO Box 474, 96201-900, Rio Grande, RS, Brazil. E-mail: moreira.glaucia@gmail.com

Brazil is a large consumer of rice and the major producer outside Asia. Rice is usually contaminated with mycotoxins and several countries, including Brazil, have established maximum tolerated levels of mycotoxins in grain and byproducts. This research aimed to determine the incidence of species complexes within *Fusarium*, and quantify mycotoxin concentration in grains. A hierarchical survey was conducted during the 2015/16 season in nine fields in Rio Grande do Sul (RS), 10 in Santa Catarina (SC), and four in Tocantins (TO) states. In each field, twenty sampling units, 10 m apart, were sampled and ten panicles were collected per sampling units, totaling 200 panicles per field. Subsamples of 200 seeds were subjected to blotter test method. A random sample of fungi depicting typical and distinct *Fusarium* morphology were isolated on malt extract agar and purified on synthetic nutrient-poor agar. The strains were identified to species complexes level according to morphological characters. A total of 387 isolates was obtained all fields, being 208 from RS, 169 from SC and 10 from TO. *Fusarium* isolates were more frequently found in samples from RS (53.75%), followed by SC (43.67%) and TO (2,58%). Among the 202 isolates identified based on morphology, the most dominant species complex was *F. graminearum* (FGSC, n = 93), followed by *F. fujikuroi* (FFSC, n = 65), *F. incarnatum-equiseti* (FIESC, n = 28), and *F. chlamydosporum* (FCSC, n = 16). FGSC was dominant in SC, while FCSC was dominant in TO, but less represented in the other states. In TO, representatives of FFSC were not found. The quantification of the mycotoxins deoxynivalenol, nivalenol, fumonisins, and zearalenone, using HPLC, in the grain samples is in progress and results will be presented.

Key words: Fumonisin; *Oryza sativa*; Trichotecenes; Zearalenone.

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