

## ABSTRACT

### DETERMINATION OF ANASTOMOSIS GROUPS OF THE PATHOGENIC *Rhizoctonia* spp. ISOLATES COLLECTED FROM VARIOUS CROPS IN AYDIN PROVINCE

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The objective of this study is determination of anastomosis groups of *Rhizoctonia* spp. isolates obtained from various crops being widely grown in Aydın Province. Samples were collected from the root and crown tissue of the diseased plants of watermelon, peanut, wheat, cotton, tomato, potato, and strawberry and 185 *Rhizoctonia* spp. isolates were obtained in total. *Rhizoctonia* spp. were found all counties wherever sampling was conducted. As total, 106 *Rhizoctonia* spp. isolates selected from various hosts were evaluated in terms of colony characteristics, sclerot formation and hyphae width on water agar media. Hyphae width of the isolates varied between 3.3-7,3  $\mu\text{m}$ . Among white, cream and brown colonies, brown colonies were found to be dominant. Except strawberry, the isolates from all the other hosts were found to be multinucleate. Except 12 isolates from watermelon, all isolates were found to be pathogenic on the hosts from which they were obtained. Results of the anastomosis test indicated that there were four different anastomosis group among the multinucleate isolates. All isolates from potato, cotton, watermelon, peanut and one isolate from corn were found to be AG 4. All of the isolates from tomato were identified as AG 3. Eight multinucleate isolates from strawberry were AG 2-1. All isolates from wheat and 6 isolates from corn were found to be AG-5.

**Key words:** *Rhizoctonia* spp., watermelon, corn, peanut wheat, cotton, tomato, potato, strawberry, anastomosis