**Abstract**

Rice is a major staple food for more than two thirds of the world population. Pathogenesis-related proteins-10 (PR10) have a range of 154 to 163 amino acid with molecular weight ~ 17 kDa. They are acidic and generally intracellular and cytosolic proteins accumulate in plants in response to biotic and abiotic stresses. In the present study, a PR10 gene and its corresponding protein were characterized in *O. sativa*, *O. barthii*, *O. glaberrima*, *O. glumipatula*, *O. meridionalis*, *O. nivara*, *O. rufipogon* and *O. punctata*. The results revealed a narrow range of variation at both DNA and protein levels in all examined species except *O. glumipatula*. The latter showed a relatively obvious structural variation at protein level. Such variation may be beneficial against different types of stress that requires further elucidation to exploit in rice breeding programs.