

Second Laureate Fundamental Research

26th Khwarizmi International Award (KIA)



- **Researcher:** Prof. Muhammad Ashraf
- **Nationality:** Pakistani
- **Date of Birth:** 1953
- **Field:** Stress Biology
- **Position:** Professor
- **Scientific Affiliation:** Department of Botany, University of Agriculture, Faisalabad, Pakistan
- **Research Work Title:** Plant Stress Physiology and Molecular Biology

● **Abstract:**

For the successful achievement of salinity problem, Dr. M. Ashraf has proposed various reclamative and curative measures which are highly cost-effective that can be contemplated particularly in developing countries. Dr. M. Ashraf devised a number of new techniques for screening large numbers of individuals (30,000 – 20,000) at high selection pressure after just 2-3 weeks growth, because the greater the number of genotypes screened, the greater would be the possibility of selecting some highly salt tolerant individuals. The selection lines of various crops such as canola, cotton, maize, pearl millet, different pulse crops, different forage grasses, oil-seed crops, developed so far are highly salt tolerant in comparison with their respective base populations, and most thrived well on salt affected soils after substantial amendments. It is imperative to note that a cultivars of spring wheat “S24” (USDA-ARS National Centre for Genetic Resources Preservation PI No. 652453; Plant Genetic Resource Institute, National Agricultural Research Centre, Islamabad, Pakistan Acc22864-; recently published in Journal of Plant Registration USA; 37-34 :4) developed by Dr. M. Ashraf after rigorous selection procedure using physiological, molecular and genetic means, is currently being used as a promising salt tolerant cultivar at different national and international institutions.



Wheat cultivar S24 developed by Prof. Muhammad Ashraf

● **Biography:**

Prof. M. Ashraf did his PhD from University of Liverpool, UK in 1986. In 1993, he earned Fulbright Award and proceeded to University of Arizona Tucson (USA) for postdoctoral work. Owing to his considerable scientific attainment, he was awarded D.Sc in 2011 by the University of Liverpool. Dr. Ashraf's has produced 64 PhDs (30 as major supervisor +34 as member). Recently, Pakistan Council for Science and Technology has ranked him First in Agriculture and Biological sciences. He was selected as a Honorary scientist in 2005 and later on an advisor by the Republic of South Korea. He earned the title of HEC Distinguished National Professor by the Higher Education Commission in 2005. Dr. Ashraf earned the First Position in Biosciences in the COMSTECH ranking of scientists of OIC countries done 4 years ago. His journal impact factor is 490, h-index 33 and citation index 5500, the latter two being highest in Pakistan among all experimental scientists.

