Preface

Research, obviously is an endless process, but very fascinating and rewarding. The outcome of the research activities is published in research journals or books. The Department of Botany at the University of Karachi was established in 1953. The first research paper of this department was published 1955. During the last 57 years, 2333 research papers have been published from the Department of Botany, an average of 41 papers published each year. It is interesting to note that during the first thirty years (up to 1984) only 555 papers were published with an average of 20 papers per year. Thus it is obvious that during the last 27 years or so there has been considerable increase in research activity. During the last decade, through the efforts of Prof. Atta-ur-Rahman, Ex-Chairman, Higher Education Commission, the facilities provided to the schools of higher learning have increased many folds. One should therefore expect to have concurrent increase in the research activities in Pakistan.

Such publications are extremely important for preserving the important information for the use of posterity. Whatever knowledge we may have accumulated and the experience we may have gained is bound to perish with us except the knowledge that we may have transferred through publications. Thus through publication, depending upon the importance of ones contribution, one is likely to lie longer, as all great men through their contributions seem to have achieved perpetual life.

Prof. Dr. Muhammad Quaiser
University of Karachi

DEPARTMENT OF BOTANY
UNIVERSITY ROAD
KARACHI 75270
PAKISTAN

Foreword

Department of Botany published list of contributions made by the teaching and research faculty in 2006 and 2008. The current booklet is a revised and up-to-date list of publications from 1955 to 2011 and contains 2333 titles of papers published with an average of 41 papers per year. Research activity of the department may be divided into three eras. The first thirty years (up to 1984) only 555 papers were published with an average of 18 papers per year. The second era (1985-2006) is most active era of the department and during this period 1439 papers with an average of 65 papers per year were published due to research projects and the research facilities. Though during the third era (2007-2011) 339 papers with an average of 68 papers per year were published but there has been considerable decrease in research activity and transfer of projects and faculty from the department. As the head of Institution has been mention earlier that during the last decade, through the establishment of Higher Education Commission, the Universities and Centres of Higher Learning are in a much better position so far as research facilities are concerned. However, I regret to point out that our productivity would have been much higher in ease continuous supply of electricity and availability of faculty and research projects.

Prof. Dr. Muhammad Javed Zaki
Chairman
FACULTY MEMBERS

Professor Dr. Surayya Khatoon, M.Sc. (Kar.), Ph.D. (Kar.)
Plant Taxonomy – Cytotaxonomy, Plant Reproductive Biology, Biodiversity.

Professor Dr. Muhammad Javed Zaki, M.Sc. (Kar.), Ph.D. (Kar.)
Plant Pathology, Nematology – Biological Control of Root Infecting Pathogens

Professor Dr. Syed Ehteshamul-Haque, M.Sc. (Kar.), Ph.D. (Kar.)
Mycology and Plant Pathology, Agricultural Biotechnology, Bacteriology, Nematology, Root nodule bacteria, PGPR

Professor Dr. Aliya Rehman, M.Sc. (Kar.), M.S. (USA), Ph.D. (Kar.)
Marine Botany – Phycochemistry of Marine Benthic Algae

Professor Dr. Raiha Qadri, M.Sc. (Kar.), Ph.D. (Kar.)
Applied Botany – Biological nitrogen fixation, Plant Anatomy and Microscopy

Professor Dr. Anjum Perveen, M.Sc. (Kar.), Ph.D. (Kar.)
Plant Taxonomy – Palynology

Professor Dr. Shahnaz Dawar, M.Sc. (Kar.), Ph.D. (Kar.)
Plant Pathology – Seed Pathology, Biological Control of Plant Diseases

Dr. Rubina Abid, M.Sc. (Kar.), Ph.D. (Kar.)
Plant Taxonomy

Mrs. Rubina Iqbal, M.Sc. (Kar.), M.Phil. (Kar.)
Applied Botany – Plant Anatomy, Biological N₂ Fixation

Dr. Seemi Aziz, M.Sc. (Kar.), M.Phil. (Kar.), Ph.D. (Kar.)
Plant Ecology

Ms. Neelofar Hamid, M. Sc. (Kar.), M. Phil. (Kar.)
Plant Physiology

Dr. Zamin Shaheed Siddiqui, M.Sc. (Kar.), M.Phil. (Kar.), Ph.D. (Kar.)
Plant Physiology

Dr. Sadaf Gul, M.Sc. (Kar.), Ph.D. (Kar)
Marine Botany

Mrs. Amna Ahmed, M.Sc. (Kar.)
Applied Botany – Tissue Culture & Plant Anatomy

Mrs. Maria Hamid, M.Sc. (Kar.)
Plant Pathology
LIST OF PUBLICATIONS (1955-2011) M. JAVED ZAKI

RETIRED AND EX – FACULTY MEMBERS

AHMED, Mukhtar
AHMED, Rafiq
AHMAD, Soaleha
AHMED, Jamil
AHMED, Mahmood
AKHTER, Y.
ALI, Ahmed
ALI, Hajra Azhar
ALI, Syed Irtifaq
AZEEMUDDIN, Surraya
AZIZ, Khadija
AZIZ, Irfan
CHAUDHRI, Ikram Ilahi
FAROOQUI, Shameem Ahmed
GHAFFAR, Abdul
GUL, Biquees
GULZAR, Salman
HABIB-UN-NISA, Shahzadi
HASHMI, Masoodul Hasan
HASNAI, Syed Zulfqar-ul
HUSSAIN, Syed Mushtaq
IQBAL, Anwar
IQBAL, Muhammad Zafar
ISMAIL, Shoaib
JALALUDDIN, Muhammad
JURAIR, Ali Muhammad Mazhar
KHAN, Muhammad Ishaq
KHAN, Muhammad Ajmal
KHAN, Ruqaiya
KHAN, Shamshad Ahmad
KHATOON, Khalida
KHATOON, Salima
MALIK, Muhammad Abdul Bari
MEHDI, Fatima S.
MOHAJIR, Abdul Rashid
NAQVI, Syed Zamin Hussain
NIZAMUDDIN, Muhammad
OMER, Saood
QADIR, Syed Abdul
QAISER, Mohammad
QURAISHI, Hamida Bano
SAIFULLAH, Syed Muhammad
SAIFULLAH, Syed Muhammad
SHAD, Saleem
SHAMEEL, Mustafa
SHAUJKAT, Syed Shahid
SIDDIQI, Muhammad Yaeesh
USMAN, Mubina
VAHIDY, Ahsan Ahmed
WARNE, L. G. G.
WASIF, Sameena
ZAHID, Phool Begum

RETIRED AND EX – RESEARCH STAFF

ALI, Syed Tahir
ALAM, Jan
GHAFOOR, Abdul
QAISER, Saeeda
KHAN, Sher Wali
## HEADS OF THE DEPARTMENT

1. Prof. Dr. L.G.G. Warne 1954-1955
2. Dr. S.Z. Hasnain 1955-1958
3. Prof. Dr. S.I. Ali 1958-1959
4. Prof. Dr. S.H.Z. Naqvi 1959-1963
5. Prof. Dr. S.I. Ali 1963-1972
6. Prof. Dr. Rafiq Ahmad 1972-1975
7. Prof. Dr. Abdul Ghaflar 18.8.1975-17.8.1977
8. Prof. Dr. Mahmood Ahmad 18.8.1977-17.8.1979
10. Prof. Dr. Rafiq Ahmad 1982-1986
11. Prof. Dr. Abdul Ghaflar 20.11.1986-22.8.1992
15. Prof. Dr. S.M. Saifullah 22.2.2001-6.6.2001
16. Prof. Dr. Soaliha Ahmad 7.6.2001-14.9.2001
17. Prof. Dr. M. Qaiser 25.9.2001-17.5.2004
18. Prof. Dr. S. Shahid Shaukat 18.5.2004-15.1.2006
20. Prof. Dr. Surayya Khatoon 01.10.2008-30.09.2011
21. Prof. Dr. M. Javed Zaki 01.10.2011- to date
Fig. 1. The number of research papers published by the Department of Botany, University of Karachi, during 1955 to 2011.

Fig. 2. Relationship of the number of research papers published (Y) and the publication age of the Department of Botany (X, Years) i.e. from 1955 to 2011.
Fig. 3. Frequency distribution of number of research papers published by the Department of Botany, University of Karachi, during 1955 to 2011.

Fig. 4. The term-wise publication of research papers. Each term is based on five years except the last term (2010-2011) based on two years only. Figure above the bar shows the data value.
LIST OF PUBLICATIONS FROM 1955-2011

1955


1957


1958

1959


23. Qadir, S.A. 1959. On the stabilization of sand dunes at Clifton beach. Scientist. 3:

1960


1961


1962


1963


1964


1965


1966


1967


1968

144. Ahmad, R. 1968. The mechanism of salt tolerance in *Suaeda fruticosa* and *Haloxylon recurvum*. Plant and Soil 18: 357-362.


1970


1972


1973

241. Abbas, S.Q and A. Ghaffar 1973. Inhibition of certain fungi by Memmoniella
LIST OF PUBLICATIONS (1955-2011)  

M. JAVED ZAKI


25


1974


1975


329. Shaukat, S.S. 1975. Effects of simazine, atrazine and 2, 4-d on 14 co2-fixation and


1976


343. Ghaffar, A. 1976. Inhibiton of fungi as affected by oxalic acid production by


1977


### 1978


1979


1980


1981


1982


41


1983


43


1984


LIST OF PUBLICATIONS (1955-2011)  

M. JAVED ZAKI


1985


558. Ahmad, R., S, Ismail and D. Khan. 1985. Use of highly saline water for growing


the coast of Karachi. Pakistan Journal of Botany 17: 141-152.


1986


1987


<table>
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<tr>
<th>Publication Number</th>
<th>Author(s) and Title</th>
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**1988**


**1989**


739. Shahzad, S., S. Ehteshamul-haque and A. Ghaffar. 1990. Efficacy of *Pasteuria penetrans* and *Paecilomyces lilacinus* in the biological control of *Meloidogyne*


1990


63


### LIST OF PUBLICATIONS (1955-2011)

<table>
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1991


1992


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<tr>
<td>883.</td>
<td>Begum, M. and N. Khatoon</td>
<td>1992</td>
<td>Addition to the species of <em>Dilophus</em> and <em>Spatoglossum</em> from the coast of Pakistan</td>
<td>Pakistan Journal of Botany</td>
<td>24</td>
<td>93-97</td>
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<td>884.</td>
<td>Chaghtai, F. and S.M. Saifullah</td>
<td>1992</td>
<td>First recorded bloom of <em>Navicula Bory</em> in a mangrove habitat of Karachi</td>
<td>Pakistan Journal of Marine Sciences</td>
<td>1</td>
<td>139-140</td>
</tr>
</tbody>
</table>


Islamic Academy of Sciences 5: 279-281.


1993


research on new product development. R. Ali and P.J Barlow (eds.). University of Humberside, Hull, UK.


1994


Hasanin, M. Ishaq and A. Azhar (eds.). Department of Biochemistry, University of Karachi, Karachi – 75270, Pakistan.


87


1995


1996


**1997**


1998


106


107


1999


2000


<table>
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<tr>
<th>No.</th>
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<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
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<tr>
<td>1481</td>
<td>Rizvi, M.A., S. Farooqui and M. Shameel</td>
<td>Bioactivity and elemental composition of certain seaweeds from Karachi coast</td>
<td>Pakistan Journal of Marine Biology</td>
<td>6</td>
<td>207-218</td>
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<td>1482</td>
<td>Saeed, S. and S.S. Shaukat</td>
<td>Effect of seed size on germination, emergence, growth and, seedling survival of <em>Senna occidentalis</em> Link</td>
<td>Pakistan Journal of Biological Sciences</td>
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<td>292-295</td>
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<td>1483</td>
<td>Saifullah, S.M., and F. Rasool</td>
<td>Mangroves of Pakistan-Iran border near Gulf of Oman</td>
<td>Pakistan Journal of Botany</td>
<td>32</td>
<td>227-234</td>
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<td>1484</td>
<td>Shabbir, S. and M.I. Khan</td>
<td>Reversal of ABA-induced inhibition of lettuce seed germination by homoeopathic remedies</td>
<td>Pakistan Journal of Botany</td>
<td>32 (1)</td>
<td>11-114</td>
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<td>1485</td>
<td>Shahzad, S.</td>
<td>Root-knot disease of betelvine in Pakistan</td>
<td>Proceeding National Congress of Plant Pathology</td>
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<td>1486</td>
<td>Shahzad, S.</td>
<td>Anthracnose disease of betelvine in Pakistan</td>
<td>Pakistan Journal of Botany</td>
<td>32</td>
<td>41-44</td>
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<td>1487</td>
<td>Shameel, M., S.H. Khan and S. Afaq-Husain</td>
<td>Biodiversity of marine algae along the coast of Balochistan, Pakistan</td>
<td>Pakistan Journal of Marine Biology</td>
<td>6</td>
<td>69-100</td>
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<tr>
<td>1488</td>
<td>Shameel, M.</td>
<td>Biodiversity of seaweeds growing along Balochistan coast of the north Arabian Sea</td>
<td>Proceeding National ONR Symposium on “Arabian sea as a resource of biological diversity”</td>
<td>V.U. Ahmed (ed.) HEJ Institute of Chemistry, University of Karachi, Karachi, Pakistan</td>
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<td>1489</td>
<td>Shaukat, S.S. and N. Burhan</td>
<td>Fecundity, seed characteristics and factors regulating germination of <em>Rhynchosia minima</em> (L.) P.C</td>
<td>Pakistan Journal of Botany</td>
<td>32</td>
<td>211-226</td>
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<td>1490</td>
<td>Shaukat, S.S. and G.R. Sarwar</td>
<td>Opaline silica in the leaves of some grasses and sedges of Karachi</td>
<td>Pakistan Journal of Biological Sciences</td>
<td>3</td>
<td>1648-1653</td>
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<td>1492</td>
<td>Siddiqui, I. A., S. Ehteshamul-Haque, M. J. Zaki and A. Ghaffar</td>
<td>Use of <em>Pseudomonas aeruginosa</em> with <em>Memnoniella echinata</em> in soil amended with neem cake and chemical fertilizers for the management of root rot and root knot disease in mungbean</td>
<td>Pakistan Journal of Biological Sciences</td>
<td>3</td>
<td>627-629</td>
</tr>
</tbody>
</table>


124

2001


disease control by fungal filtrate. Pakistan Journal of Biological Sciences 4: 429-432.


2002


1671. Siddiqui, I.A. and S.S. Shaukat. 2002. Zinc and glycerol enhance the production of nematicidial compounds *in vitro* and improve the biocontrol of *Meloidogyne*
javanica\textit{in} tomato by fluorescent pseudomonads. Letters in Applied Microbiology 35: 212-217.


2003


2004


2005


2006


160


2007


169


2008


2009


2244. Dawar, S., M.J. Zaki, N. Ikram and M. Tariq. 2010. Gamma radiations (*60*Co) exposure and application of antagonists for the suppression of root rot diseases in


2011


191


