



## University of Karachi

Karachi - 75270, Pakistan

**Vice Chancellor**

### 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 seats 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 Qaiser**



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Date \_\_\_\_\_ 20

### 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-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 case 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 N<sub>2</sub> 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

**RETIRED AND EX – FACULTY MEMBERS**

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

**RETIRED AND EX – RESEARCH STAFF**

ALI, Syed Tahir	QAISER, Saeeda
ALAM, Jan	KHAN, Sher Wali
GHAFOOR, Abdul	

**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 Ghaffar	18.8.1975-17.8.1977
8. Prof. Dr. Mahmood Ahmad	18.8.1977-17.8.1979
9. Prof. Dr. S.I. Ali	1979-1982
10. Prof. Dr. Rafiq Ahmad	1982-1986
11. Prof. Dr. Abdul Ghaffar	20.11.1986-22.8.1992
12. Prof. Dr. Mahmood Ahmad	23.8.1992-22.8.1995
13. Prof. Dr. Phool Begum Zahid	23.8.1995-22.8.1998
14. Prof. Dr. Muhammad Ishaq Khan	23.8.1998-21.2.2001
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
19. Prof. Dr. M. Zafar Iqbal	16.1.2006-30.09.2008
20. Prof. Dr. Surayya Khatoon	01.10.2008-30.09.2011
21. Prof. Dr. M. Javed Zaki	01.10.2011- to date

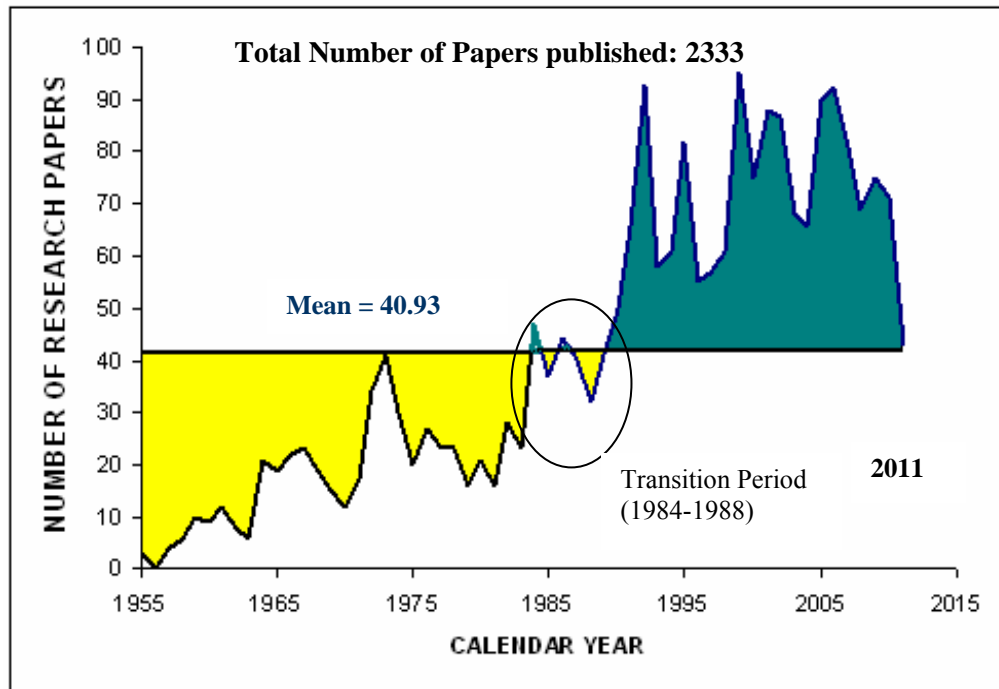


Fig.1. The number of research papers published by the Department of Botany, University of Karachi, during 1955 to 2011.

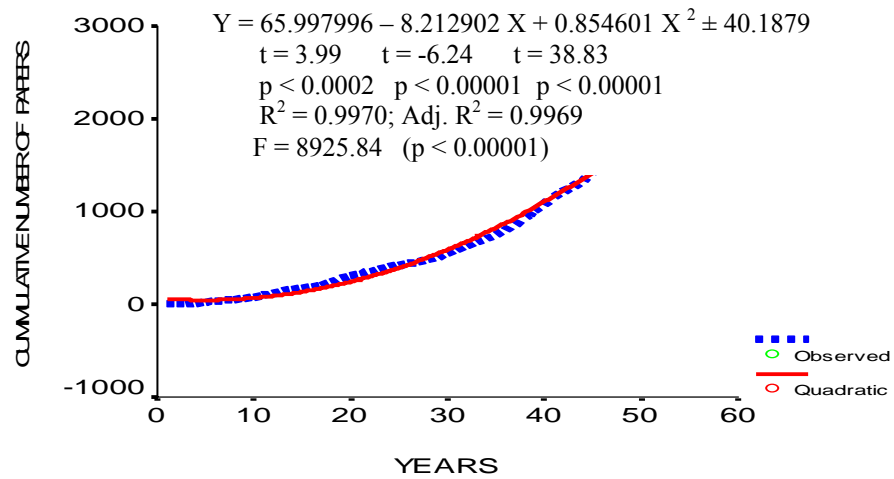


Fig. 2. Relationship of the number of research papers published (Y) and the publication age of the Department of Botany (X, Years) i.e. from 1955 to 2011.

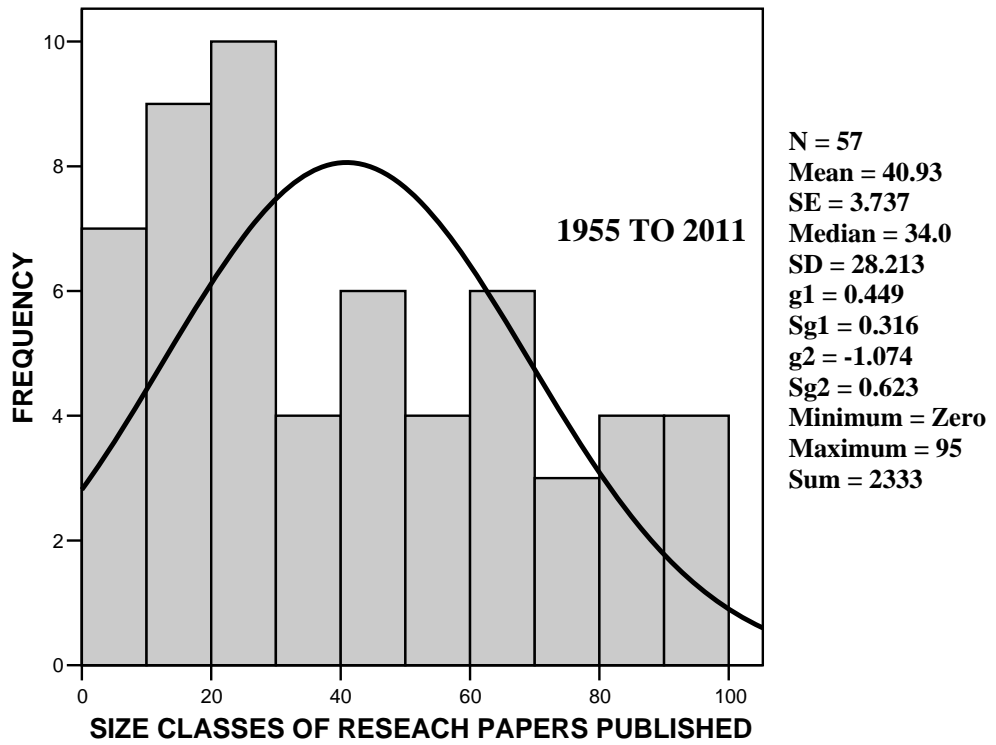


Fig. 3. Frequency distribution of number of research papers published by the Department of Botany, University of Karachi, during 1955 to 2011.

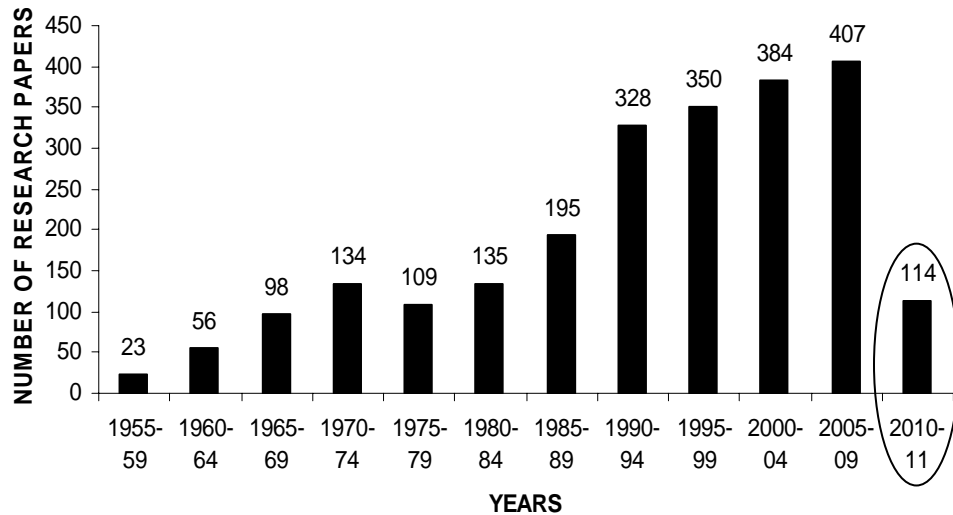


Fig. 4. The term-wise publication of research papers. Each term is based on five years except the last term (2010-2011) based on two years only. Figure above the bar shows the data value.

**LIST OF PUBLICATIONS FROM 1955-2011**

**1955**

1. Chaudhri, I.I. 1955. Pakistan santonica. *Economic Botany* 9: 22-227.
2. Mallik, M.A.B. 1955. Medicinal plants of East Pakistan. *Medicus*, 10: 216-224.
3. Naqvi, S.H.Z. 1955. The introduction of thiamine by *Cercospora cruenta* Sacc. *Canadian Journal of Botany* 33: 1-4.

**1957**

4. Ali, S. I. 1957. Proposal for the conservation of the generic name *Gueldenstaedtia* Fischer. *Taxon* 6: 59.
5. Ali, S. I. 1957. *Dolichos bracteatus* Baker, clarification of nomenclature. *Journal of the Bombay Natural History Society* 54:
6. Ali, S. I. and S. M. H. Jafri. 1957. Some abnormalities of flowers and fruits of *Luffa cylindrica* (L.) Roem. *Scientist* 2: 22-23.
7. Naqvi, S. H. Z. 1957. Studies on aging of conidia of *Monilinia fructicola* (Wint.) Honey. *Canadian Journal of Botany* 35: 635-645.

**1958**

8. Ali, S. I. 1958. Revision of the genus *Indigofera* L. from West Pakistan and N. W. Himalayas. *Botaniska Notiser* 111: 543-577.
9. Ali, S. I. 1958. A new species of *Sesbania* from Africa. *Kew Bulletin* 12: 287-288.
10. Ali, S. I. 1958. Notes on the genus *Astragalus* L. from West Pakistan and N. W. Himalayas. *Kew Bulletin* 12: 303-318.
11. Ali, S. I. 1958. On the identity of *Kerstania* Rech. *Journal of the Bombay Natural History Society* 55: 378-380.
12. Chaudhri, I. I. and S. A. Qadir. 1958. Sand dune vegetation of coastal regions of Karachi. *Pakistan Journal of Forestry* 8: 337-341.
13. Qadir, S.A. and M.A.B. Mallik. 1958. A new record of *Alternaria nelumbii* Enlows and Rand. in Indo- Pak. Sub-continent. *Pakistan Journal of Scientific and Industrial Research* 1: 316.



## 1959

14. Ali, S. I. 1959. A taxonomic study of the genus *Chesneya* Lindl. ex. Endl. from W. Pakistan and N. W. Himalayas. *Scientist* 3: 1-12.
15. Ali, S. I. 1959. Revision of the genus *Oxytropis* Dc. from West Pakistan and N. W. Himalayas. *Phyton* 8: 49-61.
16. Ali, S. I. 1959. A taxonomic study of the genus *Colutea* from Indo-Pak. Sub-continent. *Botaniska Notiser* 112: 488-494.
17. Hasanain, S.Z. A. Khan and A. Zaidi. 1959. Rusts and smuts of Karachi. Monograph No.2. Department of Botany, University of Karachi, Karachi, Pakistan. Pp.33.
18. Mallik, M.A.B. 1959. Fungus flora of Dacca garden soil. *Scientist* 3: 50-54.
19. Mallik, M.A.B. 1959. A survey of medicinal plants of the Karachi area. *Pakistan Journal of Scientific and Industrial Research* 2: 66-68.
20. Naqvi, S.Z.H. and M.J. Hussain. 1959. Influence of nitrogen on the growth and sproulation of *Alternaria* sp., isolated from the leaves of *Arachis hypogea* Linn. *Scientist* 3: 19-22.
21. Naqvi, S.Z.H. and S.M. Hussain. 1959. Influence of humidity and aging on the germination of *Alternaria tenuissima*. *Pakistan Journal of Scientific and Industrial Research* 2: 274-278.
22. Naqvi, S.Z.H. and S.M. Hussain. 1959. Investigaion on the influence of ultraviolet irradiation upon the germination and growth of *Alternaria tenuissima* (Fr.) Wilt. *Agriculture Pakistan* 10: 207-215.
23. Qadir, S.A. 1959. On the stabilization of sand dunes at Clifton beach. *Scientist*. 3:

## 1960

24. Ahmad, R. 1960. Translocation of metabolically absorbed mineral ions from the roots as measured by radioactive calcium and phosphorus. Proceeding of 4<sup>th</sup> Pan – Indian Ocean, Scientific Conference.
25. Ahmad, R. and M. Iqbal. 1960. The effects of phosphorus and nitrogen deficiencies on the roppination and accumulation of sugars. Proceeding of 4<sup>th</sup> Pan – Indian Ocean, Scientific Conference.
26. Ali, S.I. 1960. Three new species of *Astragalus* L. from West Pakistan. *Candollea* 17: 87-95.

27. Faruqi, S.A., G. Begum, P.C. Nada, G. C. Christense. 1960. A study of the seasonal foods of the black francolin (*Francolius francolinus* Linn.) the grey francolin (*F. pondicerianus* Gmelin) and the common sandrouse *Pterocles exstus* Temminck) in India and Pakistan. Journal of Bombay Natural History Society 57: 355-361.
28. Faruqi, S.A. and I.V. Holt. 1960. Teratological studies in *Heliotropium curassavicum*. Proceeding of Oklahoma Academy Sciences. 41: 19-22.
29. Jurair, A.M.M. and A. Khan. 1960. A new species of *Alternaria* on *Cassia holosericea*. Pakistan Journal of Scientific and Industrial Research 3: 72.
30. Nizamuddin, M. 1960. A systematic approach to the classification of Fucales. Pan-Indian Ocean Science Conference 17.
31. Nizamuddin, M. and H.B.S. Womersley. 1960. Structure and systematic position of the Australian brown alga, *Notheia anomala*. Nature 187: 673-674.
32. Rizvi, S.R.H. and S. Hasnain. 1960. A study of water melon rust. Pakistan Journal of Scientific and Industrial Research 3; 163-168.

#### 1961

33. Ali, S.I. 1961. Revision of the genus *Astragalus* from W. Pakistan and N. W. Himalayas. Biologia 7: 7-92.
34. Azeemuddin, S. and J. Ponchet. 1961. Detection of *Pyricularia oryzae* and *Helminthosporium oryzae* Preda de Haan on Agar media. Annals Epiphytics 12: 141-147.
35. Faruqi, S. A 1961. A cytological note on *Heliotropium parviflorum* Murray. Southwestern Naturalist 6: 100.
36. Faruqi, S.A. and J.M.J. de Wet. 1961. Cytological studies in *Heliotropium* from W. Pakistan. Caryologia 3: 313-316.
37. Faruqi, S.A. 1961. Abnormal Meiosis and polyad formation in *Heliotropium ophioglossum*. Cytologia 26: 182-187.
38. Faruqi, S.A. 1961. Studies of leaf epidermis in *Bothriochloa*, *Capillipedium* and *Dichanthium*. Proceeding of Oklahoma Academy of Sciences 42: 26-30.
39. Faruqi, S.A. and J. M. J. de Wet. 1961. Cyto geography of *Bothriochloa intermedia* complex. American Journal of Botany 48: 546.
40. Ghaffar, A. 1961. Effect of viridin on the growth and infectivity of *Sclerotium cepivorum*. Pakistan Journal of Scientific and Industrial Research 4: 127-128.

41. Mallik, M.A.B. 1961. Short term measure to grow more food in Pakistan. Pakistan Journal of Forestry 11: 31-42.
42. Mehra, K.L., S.A. Faruqi and R.P. Celarier. 1961. Cytogenetical studies in the interspecific hybrid of *Setcreasea purpurea* Boon and *S. pallida* Rose. Caryologia 14: 429-437.
43. Mehra, K.L., S.A. Faruqi and R.P. Celarier. 1961. Cytology of the *Fischer* species of the genus *Setcreasea*. Phytion 17: 133-140.
44. Siddiqui, Z.A and A. Ghaffar 1961. *Allium cepa* L., a new host of *Macrophomina phaseoli* (Maubl.) Ashby. FAO- Plant. Prot. Bull., 9: 130.

**1962**

45. Ali, S.I. 1962. A taxonomic study of the genus *Gueldenstaedtia* Fischer. Candollea 18: 137-159.
46. Faruqi, S.A., R.P. Celarier and K.L Mehra. 1962. The taxonomy of *Setcreasea ovata*. Rhodora 64: 68-73.
47. Faruqi, S.A., K.L. Mehra, and R.P. Celarier. 1962. A new species of *Setcreasea* from Mexico. Rhodora 64: 329-331.
48. Mehra, K.L., S.A. Faruqi and R.P. Celarier. 1962. Meiotic behaviour of a hypotriploid interspecific hybrid of *Setcreasea brevifolia* and *S. pallida*. Current Science 31: 431-432.
49. Nizamuddin, M. 1962. The life history of *Scaberia agardhii* Greville. Annals of Botany 26: 117-127.
50. Nizamuddin, M. 1962. Studies on *Cystiphyllum muricatum* (Turner) J. Agardh 1884. New Phytologists 61: 233-243.
51. Nizamuddin, M. 1962. Classification and the distribution of the Fucales. Botanica Marina 4: 191-203.
52. Nizamuddin, M. 1962. Structure and development of *Myriodesma* (Fucales). Botanical Gazzette 124: 68-74.

**1963**

53. Ahmad, R. 1963. Absorption and distribution of radioactive phosphorus and calcium in bean plant. Annals of Botany 27: 513-515.
54. Ahmad, R. and M. Ahmad. 1963. Role of phosphorus on the growth and respiration of tomato plant. Pakistan Journal of Scientific and Industrial Research 4: 73-75.

55. Ali, S.I. 1963. A taxonomies study of the genus *Psorelea* from West Pakistan. *Biologia* 9: 17-22.
56. Faruqi, S.A. 1963. The significance of apomixes in evolution and speciation of the *Bothriochloinae*. *Biologia* 9: 57-64.
57. Mehra, K.L., S.A. Faruqi and R.P. Celarier. 1963. Cytogenetic studies in the interspecific hybrid of *Setcreasea purpurea* X *S. ovata*. *Caryologia* 16: 525-533.
58. Nizamuddin, M. 1963. Studies on the green alga, *Udotea indica* A. and E. S. Gepp. *Pacific Science* 17: 243-245.

**1964**

59. Ahmad, R. 1964. The role of transpiration in absorption and translocation of mineral salts. *Pakistan Journal of Scientific and Industrial Research* 7: 28.
60. Ahmad, R. and T.R. Naqvi. 1964. Distribution of sugars in beet root and their effects on respiration. *Karachi University Studies* 2: 48-54.
61. Ali, S.I. 1964. *Senecio lautus* Complex in Australia: I. Taxonomic considerations and discussion of some of the related taxa from New Zealand. *Australian Journal of Botany* 12: 282-291.
62. Ali, S.I. 1964. *Senecio lautus* complex in Australia. II. Cultural studies of populations. *Australian Journal of Botany* 12: 292-316.
63. Ali, S.I. 1964. A taxonomic study of the genus *Tephrosia* Pers. from W. Pakistan. *Biologia* 10: 23-37.
64. Ali, S.I. 1964. The effect of gibberellic acid on flowering in the montane race of *Senecio lautus*. *Biologia* 10: 39-45.
65. Ali, S.I. 1964. Contribution to the genus *Chesneya* Lindl. ex Endl. from West Pakistan and N. W. Himalayas. *Biologia* 10: 47-51.
66. Azeemuddin, S. 1964. Method of detection of *Pyricularia oryzae* and *Helminthosporium oryzae* on Malt Agar. *Pakistan Journal of Scientific and Industrial Research* 7: 228-229.
67. Faruqi, S.A. 1964. Cytogenetical studies of the *Bothriochloa intermedia* complex. *Cytologia* 29: 1-118.
68. Faruqi, S. A. 1964. Laboratory demonstration of chromosomal movements. *Turttox News*. 42: 252-253.
69. Ghaffar, A. 1964. *Brassica campestris*, a new pycnidial host of *Macrophomina phaseoli* (Maubl.). Ashby. *Plant Disease Reporter* 48: 928.

70. Ghaffar, A., A. Kafi and B. Mirza. 1964. Some new hosts of *Macrophomina phaseoli* (Maubl.). Ashby. Pakistan Journal of Scientific and Industrial Research 7: 71-72.
71. John, B. and H. B. Quraishi. 1964. Studies on *Periplaneta americana* in IV Pakistan populations. Heredity 19: 147-156.
72. Nizamuddin, M. 1964. The life history of *Acetabularia mobii* Solms-Laubach. Annals of Botany 28: 77-81.
73. Nizamuddin, M. 1964. Studies on the genus *Caulerpa* from Karachi. Botanica Marina 6: 204-223.
74. Nizamuddin, M. 1964. The anatomy and life history of *Cystophora acrocarpia* and *Caulocystic* (Fucales). Botanica Marina 7: 42-63.
75. Nizamuddin, M. 1964. Phylogenetic position of Siphonoclainales. Transactions American Microscopic Society 83: 282-290.
76. Nizamuddin, M. 1964. Studies on *Xiphophora* (Fucales). Karachi University Studies 1: 10.
77. Nizamuddin, M. 1964. The anatomy of *Carpoglossum confluens* (R. Br. ex Turner) Kg. xth International Botanical Congress Edinburgh.
78. Nizamuddin, M. 1964. The anatomy of *Carpoglossum confluens* (R. Br. ex Turner) Kg. Nova Hedwigia, 8: 415-419.
79. Nizamuddin, M. 1964. Cytology of Fucales. Nabatiat, Sindh University Botanical Society Jamshoro 1: 4-12.

**1965**

80. Ahmad, M. 1965. Secondary walls in phloem of *Pinus radiata* D. Don. Nature 207: 657-658.
81. Ahmad, M. 1965. Research note. Proceeding of Linnean Society NSW. 88: 404.
82. Ahmad, R. 1965. Distribution of sugars in beet root and their effects on respiration. Karachi University Studies 2: 48-54.
83. Ali, S. I. 1965. Contribution to the genus *Astragalus* L. from W. Pakistan. Botaniska Notiser 118: 87-96.
84. Ali, S. I. 1965. Contribution to the genus *Oxytropis* from W. Pakistan. Phytion 11: 102-107.

85. Ali, S. I. 1965. Some new taxa in *Senecio* L. from Australia. Kew Bulletin 19: 423-429.
86. Ali, S. I. 1965. Proposal for the conservation of the generic name *Lourea* Desv. Regnum Vegetabile 40: 25.
87. Ali, S.I. 1965. Revision of the genus *Lathyrus* Linn. from W. Pakistan. Biologia 11: 1-10.
88. Ali, S. I. 1965. Proposal for the conservation of the generic name *Flemingia* Roxb. ex. Ait. Regnum. Vegetabile 40: 25-26.
89. Ali, S.I. 1965. Revision of the genus *Caragana* Lam. from West Pakistan and N. W. Himalayas. Karachi University Studies 2: 29,47.
90. Crankshaw, W. B., S. A. Qadir and A. A. Lindsey. 1965. Edaphic controls of tree species in presettlement Indiana. Ecology 46: 688-698.
91. Ghaffar, A. and A. Kafi. 1965. *Dolichos lablab*, a new pycnidial host of *Macrophomina phaseoli* (Maubl.) Ashby. Current Science 34: 515-516.
92. Ghafoor, A. and A. Ghaffar 1965. Studies on the small leaf disease of cotton. Agriculture Pakistan 16: 449-453.
93. Jalaluddin, M. 1965. Studies in Jute retting aerobic bacteria. Economic Botany 19: 384-393.
94. Lindsey, A.A., W.B. Crankshaw and S.A. Qadir. 1965. Soil relations and distribution map of the vegetation of presettlement Indiana. Bot. Gaz. 126: 155-163.
95. Nizamuddin, M. 1965. Cytological studies of Fucales. Biologia 11: 49-60.
96. Nizamuddin, M. 1965. Classification and the distribution of the Fucales. Proceeding of IV Pan Indian Ocean Scientific Conference 27-42.
97. Siddiqi, M.Y. and M. Nizamuddin. 1965. Studies on *Dichotomosiphon tuberosus* from Pakistan. Sind University Research 1: 27-32.
98. Womersley, H.B.S and M. Nizamuddin. 1965. The morphology and taxonomy of *Cystophora* and related gener (Phaeophyta). Australian Journal of Botany 12: 53-110.

**1966**

99. Ahmad, A. and R. Ahmad. 1966. The effects of ionizing radiations on the

- germination and growth of *Triticum vulgare* Vill C-591. *Biologia* 12: 55-63.
100. Ali, S.I. 1966. Contribution to the genus *Astragalus* from W. Pakistan, II. The subgenera *Caprinus* and *Cercidothrix*. *Phyton* 11: 133-140.
101. Ali, S.I. 1966. Contribution to the genus *Astragalus* L. from W. Pakistan III. Subgenus *Tragacantha*. *Karachi University Studies* 2: 40-45.
102. Ali, S.I. 1966. The genus *Argyrolobium* Eckl. and Zeyh. (Papilionaceae) in W. Pakistan. *Sindh University Science Research Journal* 3: 11-19.
103. Ali, S.I. 1966. *Senecio lautus* Complex in Australia. III. The Genetic system. *Australian Journal of Botany* 14: 317-327.
104. Ali, S.I. 1966. A taxonomic study of the genus *Crotalaria* Linn. from West Pakistan. *Biologia* 12: 23-30.
105. Ali, S.I. 1966. A taxonomic study of the genus *Alysicarpus* Desv. from West Pakistan. *Biologia* 12: 31-36.
106. Ali, S.I. 1966. Revision of the tribe Lespedezae from West Pakistan. *Biologia* 12: 73-77.
107. Ali, S.I. 1966. The genus *Taveriera* DC. (Papilionaceae) in W. Pakistan. *Biologia* 12: 31-36.
108. Ali, S.I. 1966. A new combination in the genus *Flemingia* Roxb. ex Ait. *Biologia* 12: 78.
109. Faruqi, S.A. and Copley. 1966. A technique for separating pollen and spores from Tar. *Micropaleontology* 12: 370.
110. Faruqi, S.I. and K.L. Mehra. 1966. Nature of chromosome association in the interspecific hybrid *Setcreasea brevifolia* X. *S. purpur*. *Scientific Cultivation* 32: 196-197.
111. Ghaffar, A. 1966. Additions to the hosts of *Macrophomina phaseoli*. *Plant Disease Reporter* 50: 170.
112. Ghaffar, A. 1966. Plant disease forecasting in Southern West Pakistan. A preliminary study of brown rust of wheat and early blight of potato. *Karachi University Studies* 3: 48-52.
113. Ghaffar, A. and A.A. Qureshi. 1966. Interactions of soil microflora with *Fusarium solani* (Mart.) Sacc., the cause of dry rot of potato. *Pakistan Journal of Scientific and Industrial Research* 9: 376-381.

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