PAN-AFRICAN UNIVERSITY

NEEDS OF THE PLANT BREEDING PROGRAMME

Books Required (From the PAU Plant Breeding Curriculum, with few additions)

1. Mead, R., Curnow, R.N. and Hasted, A.M. 2002. Statistical Methods in Agriculture and Experimental Biology. 3rd edition, Chapman and Hall.
2. Snedecor, G.W. and. Cox, W.G. 1997. Statistical Methods. 7th ed. The Iowa State University Press.
3. Steel, R.G.D. 2003. Principles and Procedures of Statistics, with Special Reference to the Biological Sciences.
4. Gomez, A.K. and Gomez, A.A. Statistical Procedures for Agricultural Research. 2nd Edition
5. Little, T.M. and Hills, F.J. Statistical Methods in Agricultural Research by T.M. Little
6. Steel, R.G.D. and Torrie, J.H. Principles and Procedures of Statistics: A Biometrical Approach. Second Edition
7. Clawer, A.G. and Scaribrick, D.H.1991. An Introduction to the principles of crop experimentation. Wye College, University of London
8. Babbie, E. 2001. The Practice of Social Research. 9th edition, Wardworth Publishers Belmont UK
9. Bernard, R.H. 1995. Research Methods in Anthropology: Qualitative and Quantitative Approaches. 2nd edition. AltaMira Press England
10. Chambers, R. 2001. Participatory Workshops. A Source Book of 21 Sets of Ideas and Activities. Earthscan Publications Ltd. London.
11. Allard, R.W. 2002. Principles of Plant Breeding. 2nd ed., John Wiley and Sons, Inc. New York.
12. Poehlman, J.M. 2006. Breeding Field Crops. Fifth Edition, AVI Publishing Company, INC. Westport, Connecticut
13. Simmonds, N.W. and Smartt, J. 1999. Principles of Crop Improvement. 2nd Edition, Blackwell Science.
14. Rubaihayo, P.R. 1996. Basic Concepts of Plant Breeding. Longhorn Kenya Limited, Nairobi.
15. Fehr, W.R. 1987. Principles of cultivar development, Vol. 1. Theory and Techniques. Macmillan, New York.
16. Simmonds N.W. and Smartt, J. 1999. Principles of Crop Improvement. 2nd Edition, Blackwell Science.

17. Sleper, D.A. 2006. Breeding Field Crops. 5th Edition. Blackwell Publishing Company.
18. Gurevitch, Scheiner, and Fox 2002. The Ecology of Plants.
19. Kormondy E.J. 1969. Concepts of Ecology
20. Futuyama, D.J. 2006. Evolutionary Biology. 4th Edition. Sinauer, Massachusetts USA
21. Hartl, D.L. and Clark, A.G. 2006. Principles of Population Genetics. 4th Edition. Sinauer, Massachusetts USA.
22. Wei-Hsiung, L. 1997. Molecular Evolution. 3rd Edition. Sinauer, Massachusetts USA.
23. Falconer, D.S. and Mackay, T.F.C. 1996. Introduction to Quantitative Genetics. 4th ed. Prentice Hall, Harlow, U.K.
24. Hallauer, A.R., M.J. Carena and Miranda Filho, J.B. 2010. Quantitative Genetics in Maize Breeding. Second Edition. Springer.
25. Singh R.K. and Chaudhary B.D. 1977. Biometrical methods in quantitative genetic analysis. Kalyani publishers, New Delhi.
26. Hartl, D.L. and Clark, A.G. 2006. Principles of Population Genetics. 4th ed. Sinauer Associates, Inc. Sunderland, Massachusetts.
27. Lynch, M. and Walsh, B. 1998. Genetics and analysis of quantitative traits. Sinauer Associates, Sunderland, MA
28. Lubulwa, G. and J. Davis 1994. Inclusion of environmental and human health impacts in agricultural research. Review of some recent evaluations. CGIAR Working Paper Series No. 13.
29. Munn, R.E. 1979. Environmental Impact Assessment: Principles and Procedures.
30. Drougherty, T.C. and Hall, A.W. 1995. Environmental Impact Assessment of Irrigation and Drainage Projects. FAO Irrigation and Drainage Paper No. 53, FAO, Rome.
31. WathernMunn, P.R.E. 2001. Environmental Impact Assessment: Theory, Principles and Practices.
32. Razdan, M.K. 2003. Introduction to Plant Tissue Culture. 2nd Ed., Science Publishers.
33. Buchanan, B., Gruissem, W. and Jones, R.L. Eds. 2004. Biochemistry and molecular biology of plants. American Society of Plant Biologists, MD 20855-2768 USA.
34. Dodds, J.H., Roberts, L.W., Heslop-Harrison and Paperback, J. 2004. Experiments in Plant Tissue Culture. 4th Ed., Cambridge University Press.
35. Razdan, M.K. 2003. Introduction to Plant Tissue Culture. 2nd Ed, Science Publishers.

36. Taiz, L. 2010. Plant Physiology. 5th Edition. Sinauer Associates Inc.
37. Normah, M.N., Chin, H.F. and Reed, B.M. (Eds.) 2013. Conservation of Tropical Plant Species. Springer.
38. Trigiano, R.N. and Gray, D.J. 2010. Plant Tissue Culture, Development and Biotechnology. CRC Press.
39. Cooper, W. and Sweet, J. 2001. Risk Assessment in Fruit and Vegetable Biotechnology. Edited by V. Valpuesta. Cambridge, England: Woodhead Publishing House.
40. Bationo A.(Ed.) 2004: Managing nutrient cycles to sustain soil fertility in Sub Saharan Africa
41. Bationo, Waswa,B.,Kihara,J. and Kimeu,J. 2007. Advances in soil fertility management in Sub Saharan Africa
42. Fageria, N.K. 2006 Physiology of Crop Production. Haworth Press Inc.
43. Palaniappan, S.P. 2006. Cropping Systems in the Tropics: Principles and Management. Wiley and Sons, Eastern Limited, Bangalore, India.
44. Youdeowei, A., Ezedinma, F.O.C. and Onazi, O.C. 1988. Introduction to Tropical Agriculture. Longman, UK.
45. Bates, B.C., Z.W. Kundzewicz, S. Wu and J.P. Palutikof, (Eds.). 2008. *Climate Change and Water*. Technical Paper of the Intergovernmental Panel on Climate Change. Geneva: IPCC Secretariat.
46. IPPC. 2007. *Summary for policymakers; Mitigation.* In: B. Metz, O. R. Davidson, P. R. Bosch, R. Dave, L. A. Meyer (Eds.), *Climate change 2007*. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on climate change, Cambridge University Press, Cambridge, UK and New York, NY, USA.
47. IPCC.2007. *Synthesis Report.* In:R.K. Pachauri and A. Reisinger (Eds.). *Contribution of of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Climate Change 2007:* Cambridge, UK: Cambridge University Press.
48. Millennium Ecosystem Assessment. 2005. *Ecosystems and Human Well-Being. Synthesis*. W. Reid et al., ed. Washington, DC: World Resources Institute.

49. Otter, L., Olago, D. O. and Niangi, L. (Eds.). 2007.*Global change processes and impact in Africa: A synthesis, East Africa.* Educational Publishers, Nairobi, Kampala, Dar es Salaam.
50. Stern, N. 2006. *Stern Review on the Economics of Climate Change*. London: HM Treasury, UK.
51. Thomas, E. L., and Lee Hannah (Eds.). 2005.*Climate change and Biodiversity*, Yale University Press, New Haven and London.
52. WHO (World Health Organization). 2008. Protecting Health from Climate Change: World Health Day 2008. Geneva.
53. Agrios, G.N.2004. Plant Pathology. 4th Edition, Academic Press.
54. Campbell, C. and Madden L.V. 1990. An Introduction to Plant Disease Epidemiology. John Wiley and Sons, New York.
55. Dominique Mariu (Ed.), 2007. Diseases of Tropical Crops. Science Publishers. 250 pp.
56. Narayanasamy, P. 2007. Microbial Plant Pathogens and Crop Management. Science Publishers. 572 pp.
57. Schumann, G.L. 1991. Plant Diseases. Their biology and social impact. American Phytopathological Society.
58. Rao, G.P. et al. 2007. Sugarcane Pathology: Bacterial and Nematode Diseases. Science Publishers. 358 pp.
59. Pedigo, L. P. 1996. Entomology and pest management. 2nd Ed, Prentice Hall
60. Sharma, H.C. 2007. *Heliothis/Helicoverpa* management: The emerging trends and need for future research. Science Publishers. 482 pp.
61. Gittinger, P.J. 1982. Economic Analysis of Agricultural Projects, 2nd. Ed., Baltimore: Johns Hopkins Univ. Press (for the World Bank),
62. Pedro Belli et al., 2001. Economic Analysis of Investment Operations: Analytical Tools and Practical Applications. Washington, D.C.: The World Bank,
63. UNDP. Managing for Results: Monitoring and Evaluation
64. Nicholl, D.S.T. 1996. An Introduction to Genetic Engineering. Cambridge University Press
65. Dubey, R.C. 2009. A Textbook of Biotechnology. S. Chand and Company Ltd., Ram Nagar, New Delhi.
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