

1. Record Nr.	UNINA9910810126603321
Titolo	Plant archaeogenetics / / Gabor Gyulai, editor
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2011
ISBN	1-61209-002-8
Edizione	[1st ed.]
Descrizione fisica	1 online resource (180 p.)
Collana	Botanical research and practices Biotechnology in agriculture, industry and medicine
Altri autori (Persone)	GyulaiGabor <1953->
Disciplina	561
Soggetti	Paleobotany Plant morphology Plant genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- PLANT ARCHAEOGENETICS -- PLANT ARCHAEOGENETICS -- CONTENTS -- PREFACE -- I. MORPHOGENETICS -- Chapter 1 MORPHOGENETICS OF <i>Silene stenophylla</i> SEEDS FROM PERMAFROST OF THE LATE PLEISTOCENE (32 - 28,000 BP) -- Abstract -- Introduction -- Materials and Methods -- Conclusion -- Acknowledgment -- References -- Chapter 2 MORPHOGENETICS OF PLANT REMAINS FROM PALEOSOLS AND RODENT BURROWS BURIED IN PERMAFROST OF THE LATE PLEISTOCENE (32 - 28,000 BP) -- Abstract -- Permafrost Sediments -- Plant Remains in Ancient Rodent Burrows -- Seed Samples from Ancient Burrows -- Plant Remains in Cryopedolith and Paleosols -- Conclusions -- Acknowledgment -- References -- Chapter 3 MORPHOGENETICS OF DICOTS AND LARGE- AND SMALL- GRAINED WILD GRASSES FROM THE PALEOLITHIC ERA (OLD STONE AGE) OHALO II., ISRAEL (23,000 BP) -- Abstract -- Introduction -- Materials and Methods -- Conclusions -- References -- Chapter 4 MORPHOGENETICS OF SEEDS AND PLANT REMAINS IN THE CARPATHIAN BASIN FROM THE NEOLITHIC TO THE LATE MEDIEVAL AGE (8000 BP TO 17TH CENT CE) -- Abstract -- Introduction -- Materials and Methods -- Conclusions -- Early Neolithic (> 6000 - 5300 bce): Körös- Starevo Culture -- Middle (5300-4700 bce) and Late Neolithic (4700- 4300 bce): Linear Pottery Culture -- Early (4300-3500 bce) and Late

Copper Age (3500-3000 bce) -- Early - (3,000-1,600 bce), Middle - (1600-1300 bce) and Late Bronze Age (1300-900 bce) -- Early (Hallstatt) (900-500 bce), Middle (Skythian) (700-500 bce) and Late Iron Age (La Tène) (500-100. ce) -- Roman Age (1st - 5th Cent. ce) and Barbaricum -- Early (476-568), Middle (Pre-Hungarian Avarage) (568-895) and Late (Caroling Age) Migration Period (811-895) to The Middle Ages -- Acknowledgments -- References -- Chapter 5

MORPHOGENETICS OF ANCIENT Vitis SEEDS (3RD AND 11TH - 15TH CENTs, HUNGARY) - A GENOTYPE RECONSTRUCTION -- Abstract.

Introduction -- Materials and Methods -- Conclusion -- References --

II. ADNA EXTRACTION AND MOLECULAR PROBING OF ARCHAEOLOGICAL SPECIMENS -- Chapter 6 DNA EXTRACTION FROM SEED REMAINS OF COMMON MILLET (*Panicum miliaceum*) (4TH AND 15TH CENTs) -- Abstract -- Introduction -- Materials and Methods -- Seed Samples -- Aseptic Culture -- DNA Extraction -- PCR Amplification -- PCR Primers and SSR Analysis -- AFLP Analysis -- AFLP Fragment Recovery and Cloning -- ISSR Analysis -- mtDNA -- CAP Analysis of mtDNA -- Sequencing -- Data Analysis -- Conclusion -- Seed Samples -- Quantity and Quality of aDNAs -- AFLP Loci -- Microsatellite Loci -- ISSR Loci -- CAP-mtDNA at 5S-18S rDNA locus -- References --

Chapter 7 FLESH COLOR RECONSTRUCTION FROM aDNAS OF *Citrullus* SEEDS FROM THE 13TH, 15TH, AND 19TH CENTs (Hungary) -- Abstract -- Introduction -- Materials and Methods -- Seed Samples -- Elimination of Contaminations -- aDNA Extraction -- aDNA Amplification by PCR -- PCR Primers -- Data Analysis -- Conclusion -- Genus *Citrullus* -- Ancient Watermelon Seeds Excavated -- SSRs of aDNAs -- Acknowledgments -- References -- Chapter 8 GENETIC AND MORPHOGENETIC RECONSTRUCTION OF 15TH CENT MELON (*Cucumis melo*) FROM SEED aDNA -- Abstract -- Introduction -- Materials and Methods -- Seed Samples -- Elimination of Contamination -- Comparative aDNA Analysis with Current Melon Varieties -- PCR -- ITS -- SSR -- ALF -- RAPD -- Sequencing -- Sequence Analysis -- Data Analysis -- Conclusions -- aDNA Extracted -- ITS Analysis -- ALF-SSR Analysis -- RAPD-PCR -- References -- Chapter 9 MOLECULAR DOMESTICATION AND PHYLOGEOGRAPHY OF CUCURBIT SPECIES -- Abstract -- Introduction -- Archaeogenetical and Phylogenetic Analysis -- Genus *Cucurbita* -- Genus *Citrullus* -- Genus *Cucumis* -- Genus *Lagenaria* -- Conclusions -- References -- III. ADDITIONAL SOURCES FOR ARCHAEOGENETICS.

Chapter 10 CONSERVATION GENETICS (1710 - 2010) - CLONING OF LIVING FOSSILS: MICROPROPAGATION OF THE OLDEST HUNGARIAN BLACK LOCUST TREE (*Robinia pseudoacacia*) PLANTED IN 1710 (BÁBOLNA, HUNGARY) -- Abstract -- Introduction -- Materials and Methods -- Plant Materials -- Aseptic Bud Culture -- Molecular Analyses. DNA Extraction -- PCR Amplification -- PCR Primers -- ALF Analysis -- Conclusion -- References -- Chapter 11 COMPARISON OF THIRTEEN METHODS FOR ADNA (1731-1841) EXTRACTIONS -- Abstract -- Introduction -- Materials and Methods -- Results and Discussions -- Conclusions -- Acknowledgment -- References -- Chapter 12 COMPUTER-ASSISTED SEED MORPHOMETRY - A TOOL FOR ARCHAEOGENETICS -- Abstract -- Introduction -- Results and Discussion -- Conclusions -- References -- Chapter 13 PLANT ICONOGRAPHY - A SOURCE OF INFORMATION FOR ARCHAEOGENETICS -- Abstract -- Introduction -- Epochs -- The Paleolithic and Neolithic Record -- Mesopotamia -- Ancient Egypt -- Pre-Columbian America -- Sources -- Mosaics and Inlays -- Sculptures -- Illustrated Manuscripts -- Printed Herbals -- Paintings -- Conclusions -- References -- INDEX -- Blank Page.

