

Contents

Acknowledgements	7
Competing and data availability statement	9
Jana Apiar	
1. Introduction	15
Jana Apiar	
2. A research issue and current archaeobotanical research	17
2.1 A research issue	17
2.2 Main geographic and chronological range	17
2.2.1 Geographical region	17
2.2.2 Chronology	18
2.3 Basic terminology of the work	18
2.4 Current archaeobotanical research in the region	18
Michaela Kmošková, Jana Apiar, Balázs Komoróczy, Marek Vlach	
3. Characterisation of selected archaeological situation in Jevišovka	21
3.1 Archaeological excavation in Jevišovka	21
3.2 Pithouses	21
3.3 Above-ground structure	24
3.4 Storage pits	24
3.5 Unspecified pits	25
Jana Apiar	
4. Methods and source criticism	27
4.1 Sampling and extraction of macro-remains	27
4.1.1 Sampling and extracting of the Jevišovka assemblage	27
4.1.2 Sampling and extracting of the comparative assemblage	28
4.1.3 Volumetric 3D modelling of Jevišovka features [Alina Szabová, Zuzana Porubčanová]	28

4.2 Laboratory analysis	29
4.2.1 Determination of macro-remains	29
4.2.1.1 Morphological criteria for determining macro-remains of cultivated and harvested crop species	29
Cultivated plants	29
Cereal grains	29
Cereal chaff and straw	32
Legumes	34
Fragments of porous organic material	34
Fibre and oil plants, vegetables, spices, condiments and other use plants	34
Fruits and nuts	34
Wild plant species	35
4.2.1.2 Quantification of finds	38
4.2.2.1 Grains and seeds of cultivated plants	38
4.2.2.2 Wild plant seeds and fragments	38
4.2.1.3 Documentation of finds	39
4.3 Analysis methods	39
4.3.1 Selection, standardisation and transformation of archaeobotanical data	39
4.3.2 Descriptive statistics	39
4.3.3 Multivariate statistics [Jana Apiar, Peter Apiar]	39

Jana Apiar

5. Evaluation of the Jevišovka results in the context of the current archaeobotanical research in broader region	41
---	-----------

5.1 Cultivated plants – cereals	47
5.1.1 Recalculation of MNI to weight, nutritional value and ubiquity	57
5.1.2 Summary	60
5.2 Cultivated plants – legumes	61
5.3 Fruits, nuts, fibre and oil plants, vegetables and condiments	62
5.4 Composition of macro-remains	63

Jana Apiar

6. Pre- and post-deposition processes affecting the composition of the samples	65
---	-----------

6.1 Density of macro-remains	65
6.1.1 The density of finds on the sites and the average densities of cereal species	66
6.1.1.1 Density of macro-remains in Jevišovka	66
6.1.1.2 Density of macro-remains in the assemblage	67
6.2 Products, by-products and crop processing waste	70
6.2.1 Main component proportions	71
6.2.2 Physical properties of the weed seeds	74
6.2.3 The proportion of weed seeds of different physical properties	79
6.2.3.1 Grain reserves and wastes	81
6.2.3.2 The proportion of weed seed categories in reserves and wastes	82
6.2.3.3 Summary	84

Jana Apiar

7. Evaluation of results by analysis of ecological attributes of wild plants	85
---	-----------

7.1 Preliminary analysis	85
---------------------------------------	-----------

7.1.1 Results	86
----------------------------	-----------

7.1.2 Summary	87
----------------------------	-----------

7.2 Autecological analysis	90
---	-----------

7.2.1 Reduced matrix and grouped samples	91
---	-----------

7.3 Autecological evaluation of the Jevišovka assemblage [Jana Apiar, Peter, Apiar]	92
--	-----------

7.2.2 Non-reduced matrix and individual samples	92
--	-----------

7.3.1 Habitats in assemblage	93
---	-----------

7.3.2 Ecological indicator values	95
--	-----------

7.3.3 Summary	97
----------------------------	-----------

Jana Apiar

8. Economy	101
-------------------------	------------

8.1 Economic models	101
----------------------------------	------------

8.2.The economy of the people in the Roman period	102
--	------------

Peter Apiar, Jana Apiar

9. Evaluation of sampled volume, number of samples and obtained macro-remains from Jevišovka site through statistical models	105
---	------------

9.1 Model 1	105
--------------------------	------------

9.2 Model 2	106
--------------------------	------------

9.3 Model 3	107
--------------------------	------------

9.4 Model 4	107
--------------------------	------------

9.5 Summary	108
--------------------------	------------

Jana Apiar

10. Conclusion and discussion to the interpretation of results	109
---	------------

References	113
-------------------------	------------

Appendix	123
-----------------------	------------

Figures	124
----------------------	------------

Tables	150
---------------------	------------

Plates	220
---------------------	------------

List of abbreviations	239
------------------------------------	------------

List of Contributors	243
-----------------------------------	------------