

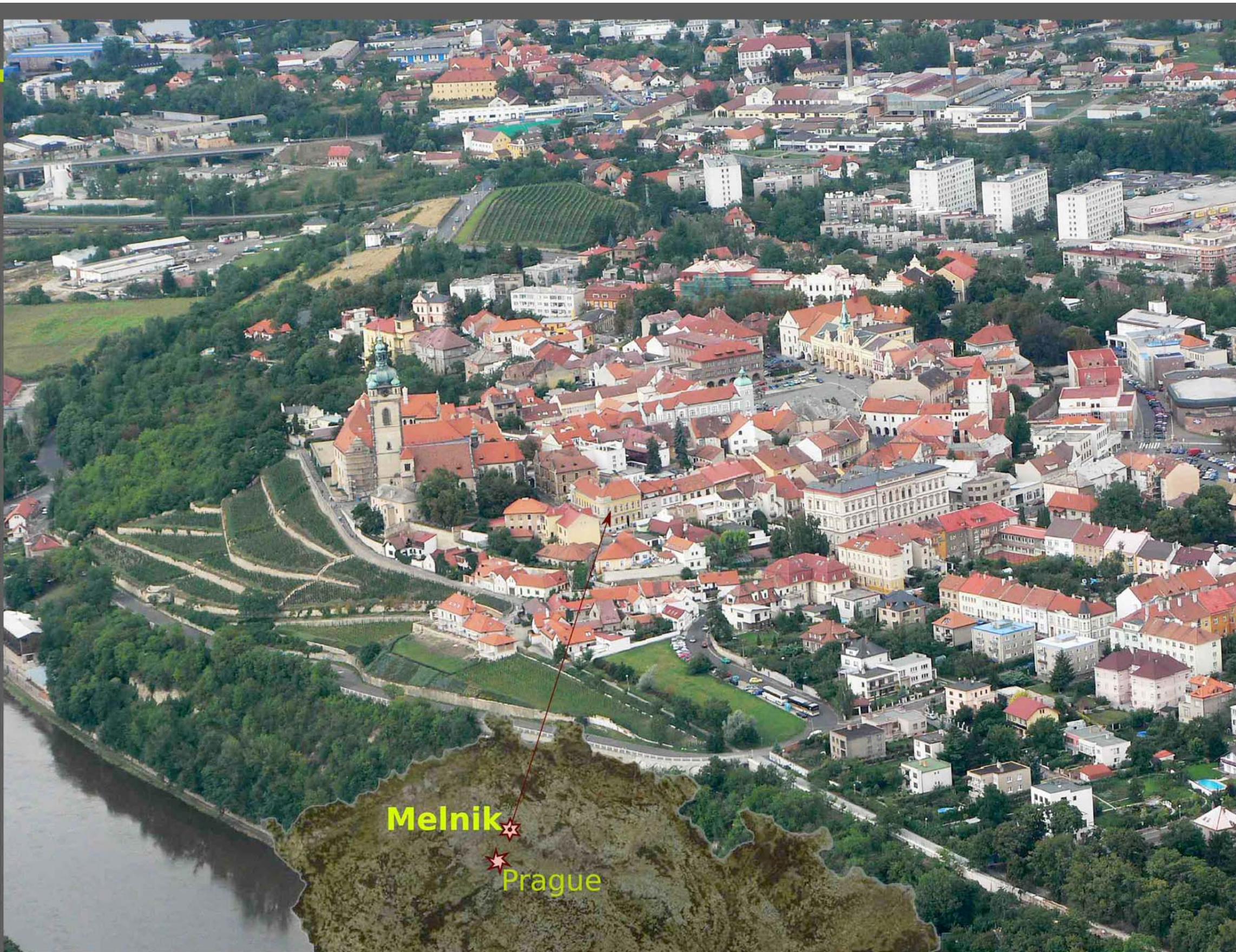
ARCHAEOLOGY

Dominant position at the confluence of the Elbe and Vltava River has been inhabited since prehistoric times with varying intensity. In 9th century first castle was built there, probably called „Pšov“, later called as „Mělník“

Fertile lowland of Central Bohemia is the important space of historical events in development of historical Bohemia. The town of Mělník at the junction of the Vltava and Elbe River is connected with wife of the first Czech Christian monarch Bořivoj I - the duchess Ludmila, grandmother of St. Wenceslas, the patron of Czech state.

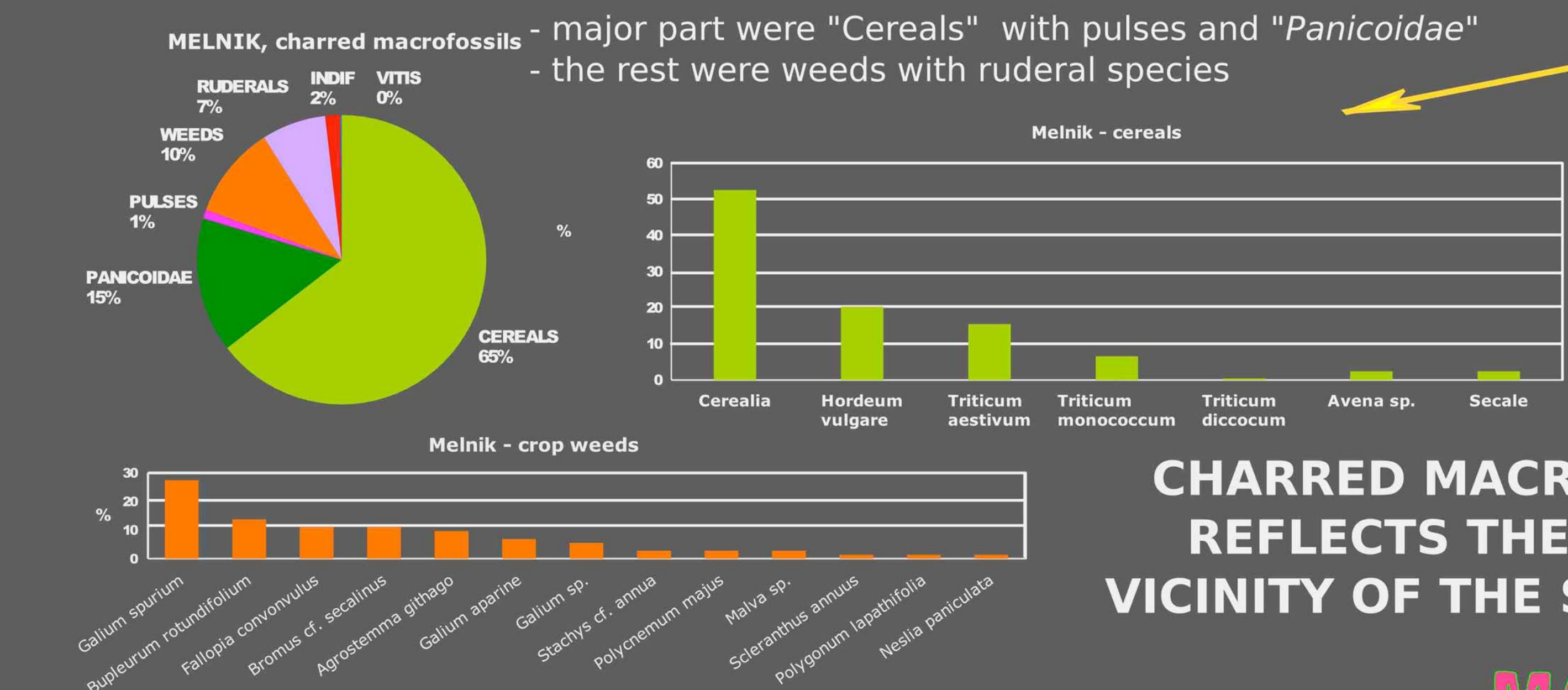
The reconstruction of historic centre of Mělník revealed the fortification of the castle from the 9th century and consequent development of settlement of medieval town, with a small settlement site near Pšovka River with the production area.

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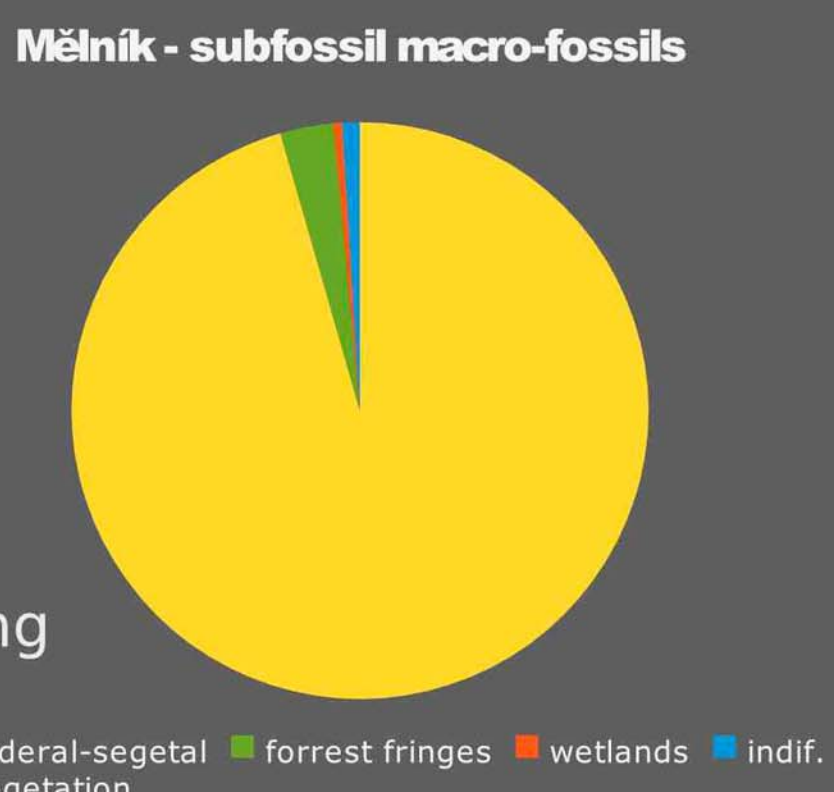
THE RECONSTRUCTION OF THE EARLY MEDIEVAL VEGETATION IN MELNIK VINEYARD REGION, CZECH REPUBLIC

MACRO-FOSSIL ANALYSIS



In the data set 1289 findings was found in 60 species
2/3 of findings was charred, 1/3 was not

- 96% built ruderal-segetal species
- *Chenopodium album*, *Ch. hybridum*, *Galium spurium*, *Hyoscyamus niger*, *Urtica dioica*, *Malva sp.* were most abundant
- small part built *Sambucus nigra* or *Rubus sp.* that could be naturally growing in the vicinity, collected or planted



CHARRED MACRO-FOSSILS
REFLECTS THE CLOSEST
VICINITY OF THE SETTLEMENT

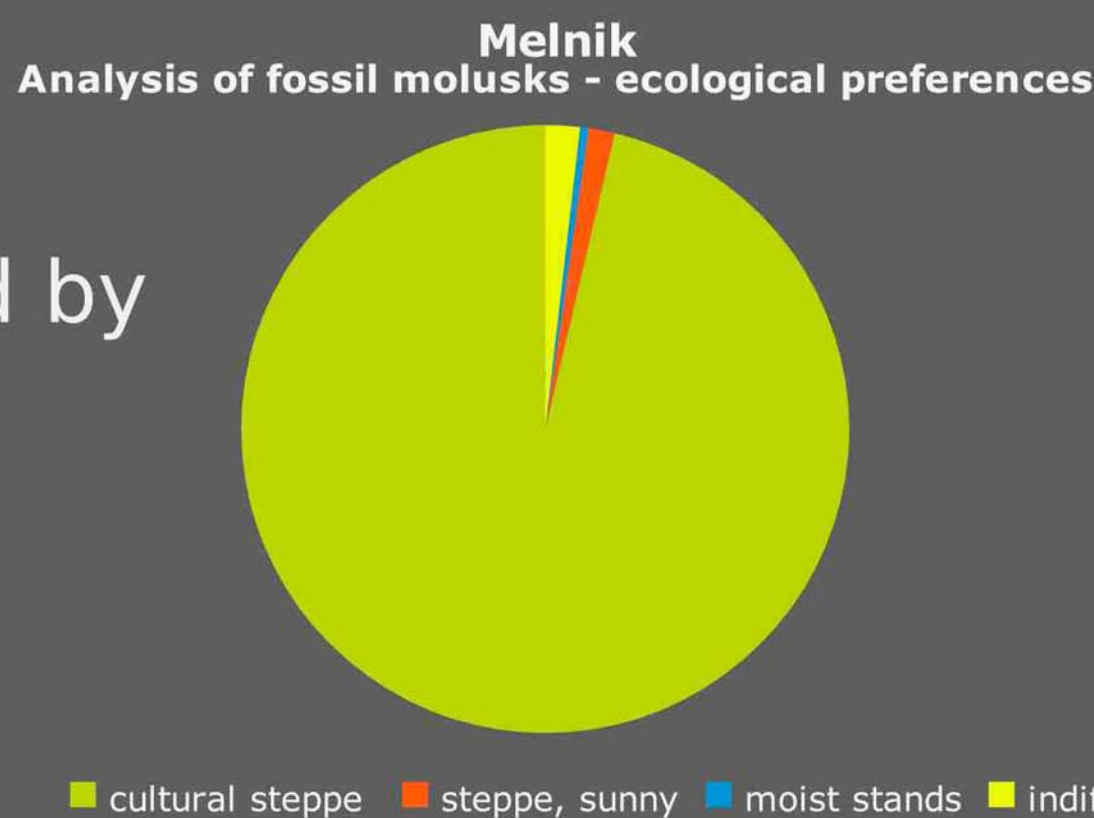
NON-CHARRED MACRO-FOSSILS
REFLECTS BROADER SURROUNDINGS

MALACOLOGICAL ANALYSIS

- 430 mollusks shells belonging to 11 species were found
- most of them inhabit stands, that could be labeled as "cultural steppe"
- some steppe species were found as well

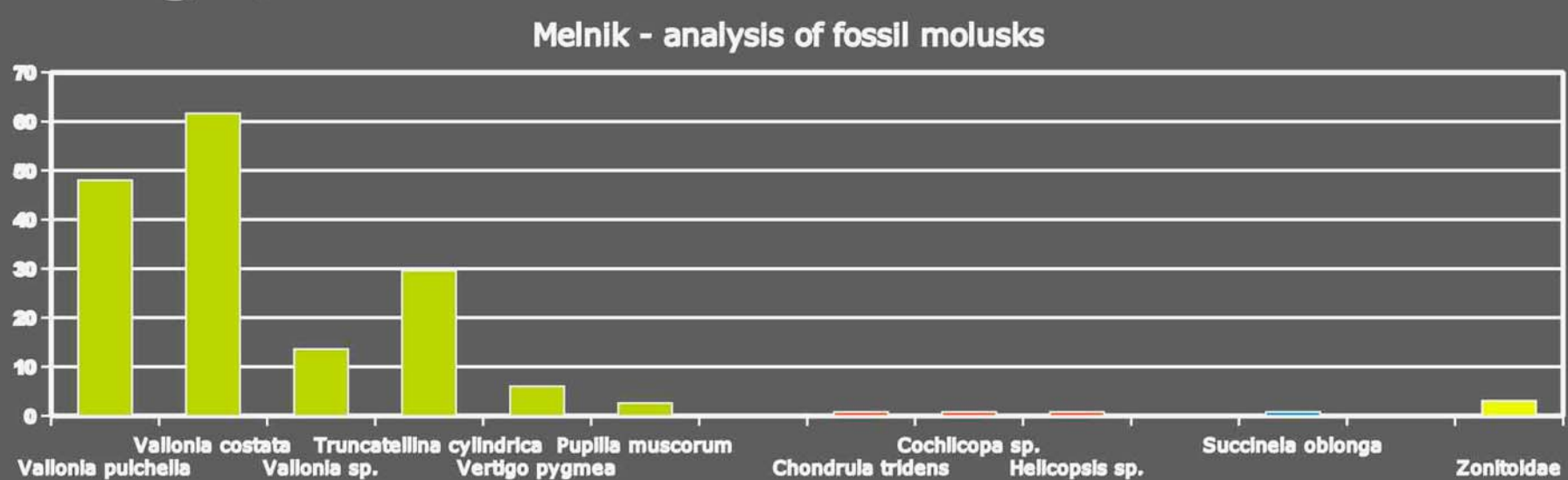
mollusks in data set are all inhabiting **open** habitats with varying moisture:
- **wet stands** (*Vertigo pygmaea*, *Succinella oblonga*)
- **semi-humid to dry habitats** (*Vallonia costata*, *V. pulchella*)
- **warm places, hillsides, rocks** (*Pupilla muscorum*, *Truncatellina cylindrica*)

cultural steppe:
= habitats often deforested and affected by human presence
e.g: pastures, meadows, orchards

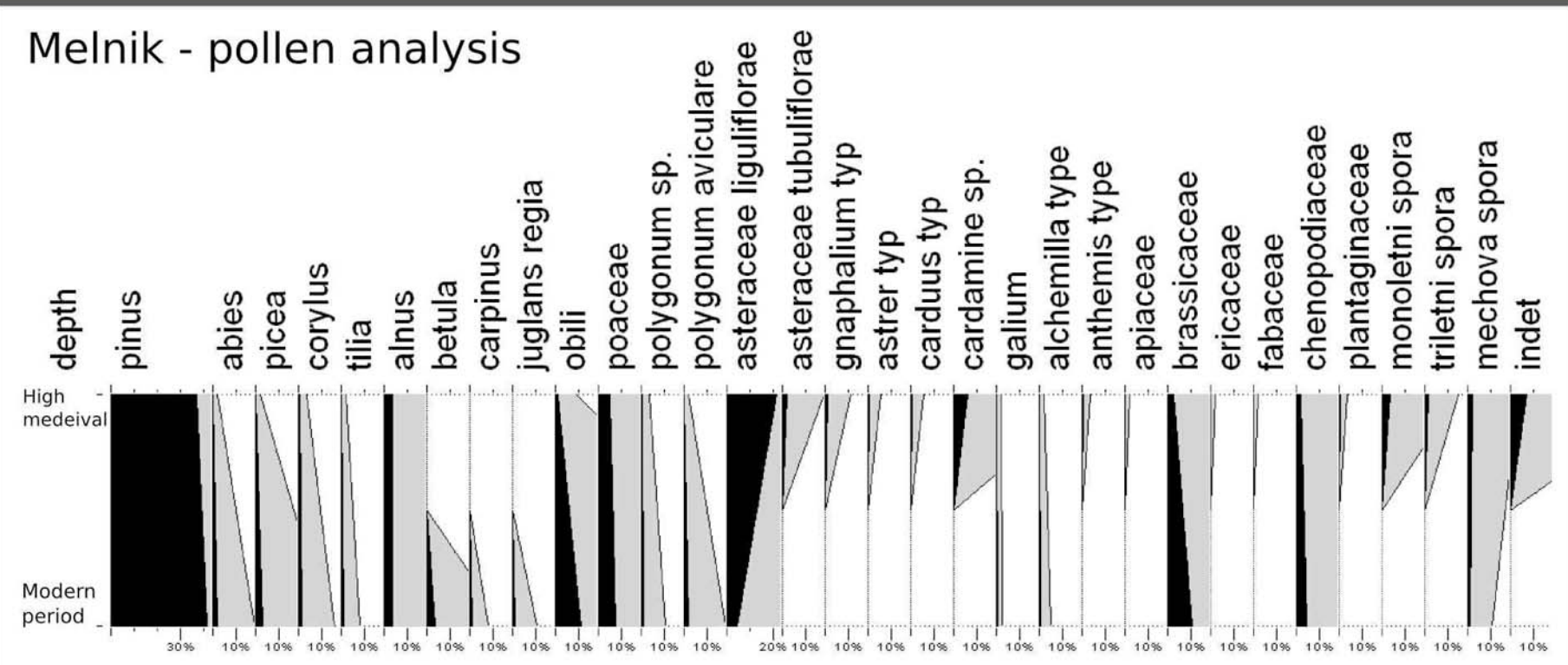


Vallonia costata
with *V. pulchella* indicator of semi-humid to dry open places

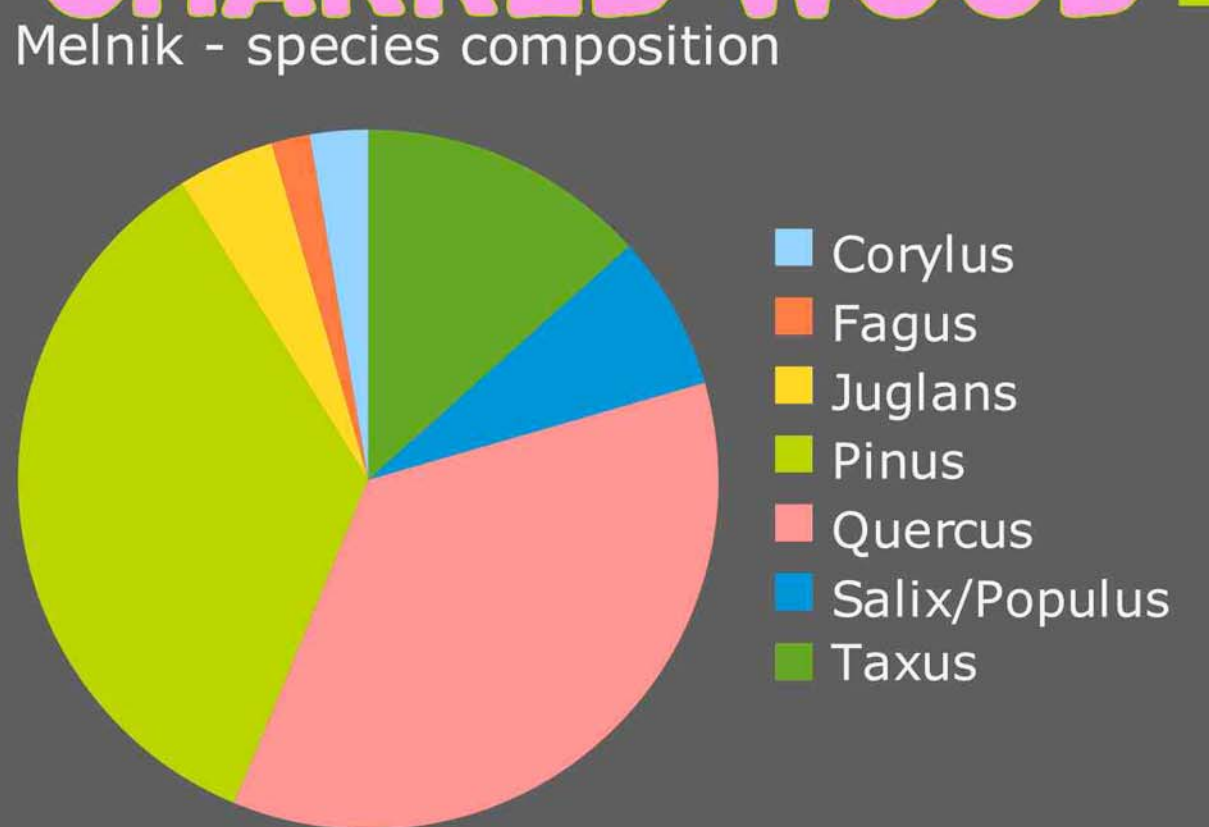
All species are
"sylviphobic"!!



ANALYSIS OF CHARRED WOOD



- Major part of charcoals built pine (*Pinus*) and oak wood (*Quercus*) - probably as a rest after fire of a house or some fortification?
- *Taxus* should be used for manufacturing weapons
- Juglans fragments are probably recent contamination - in pollen analysis, pollen grains only in Modern period deposits were found



VINEYARD HISTORY IN BOHEMIA

Winegrowing was spread from Southeast (Danube region) with culture of Roman empire

The other way for winegrowing was with Christian liturgy that was spread with the influence of Great Moravia and accepted with Premyslid dynasty

According the legend, St. Ludmila with St. Wenceslas grounded the first vineyards in Bohemia - in the Melník region



Vitis was imported in Czech as a vine, or grapes or raisins
The first finds of Vitis vinifera seed is dated in 8th from Lovosice (North Bohemia)

Our theory of wine growing support finds of "vineyard weeds" - eg. *Stachys annua*, *Bupleurum rotundifolium*)

CONCLUSION

The results of anthracological and molluscan analysis point at **mosaic landscape with pattern of intensive used open vegetation** and termophilous dry stands. All found molluscs are species **avoiding of forest** and are indicators of dry or moderate humid environment. Frequent were also species of dry, stony stands (*Truncatellina cylindrica*) or humid areas (*Succinella oblonga*, *Vertigo pygmaea*). Analysis of macro-fossils revealed the most important useful plants (*Triticum aestivum*, *Hordeum vulgare*, *Panicum milliaceum*) and also some weeds, that were quite frequent, but in recent times they are in a landscape of Czech Republic missing or very rare (eg. *Bupleurum rotundifolium*, *Stachys annua*, *Polycnemum majus*...).

