Variety in cereal production in the Late Bronze and Early Iron Ages in relation to environmental conditions

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The objective of this paper is to assess the relationship between the cereals cultivated in the Late Bronze and Early Iron Ages (ca. 1250 - 400 cal BC) on the territory of present day Czech Republic and their environmental settings. The representation of various charred cereal caryopses in the archaeobotanical assemblages from 35 archaeological sites differ, especially in the proportion of wheats and barley. The cereal assemblages were compared with a site altitude, weather conditions, soils and soil productivity. The most important environmental variable influencing the choice of a particular crop seem to be altitude associated with the length of growing season (afterwards the soil conditions). Although the ecological requirements of cereals cultivated in the Late Bronze and Early Iron Ages are not known, they presumably thrived under similar conditions to present day species/varieties and that the strategy of past crop husbandry was based on similar principles as today, e.g. the flexible adaptations to local environmental conditions in an effort to achieve optimal yields and to reduce the danger of crop failure.