INTRODUCTION

The question of cultivated and/or wild glume wheat employment in the Near East pre-pottery and pottery Neolithic, is still discussed. Particularly, if we talk about the so-called “new glume wheat type”, we know that it is one of the most hard to interpret as far as its origins, first employment and taxonomic classification are concerned. The archaeobotanical evidences of this cereal (particularly the forks) come from three Neolithic and one Bronze Age sites in North Greece, the others from Neolithic and Bronze Age sites in Turkey, Hungary, Austria, Germany. Among the earliest evidences, we find now forks coming from Mersin-Yumuktepe, dated to the Early Neolithic levels (7200 B.C. - 5800 B.C) and to the following Middle and Late Neolithic levels.

CONTEXT OF STUDY

In our study we show a thorough morphological and biometrical analysis of “new glume wheat type” fork characteristics, comparing them with the most similar species: the Triticum dicoccon. The analysed sample is represented by 50 forks per each species (dicoccon and new type).

The aims of this work are:
1) establish the taxonomical identification criteria and the diagnostic utilities in our context through a biometric analysis of spike fragments;
2) quantify the ratio of the “Triticum new glume type” to other cereal species;
3) localize the potential area of origin of the Triticum new glume type;
4) recognize the lines and modalities of diffusion of agriculture by following the spread of the Triticum new glume type.

PRELIMINARY RESULTS FROM THE BIOMETRICAL ANALYSIS

1) Triticum dicoccon shows a greatest variability in forks base width and in the internode width;
2) both species have the maximum width at the level of cicatrix disarticulation, although the Triticum new glume type has higher values;
3) Triticum new glume type presents a lower variability.

FINAL CONSIDERATIONS

On the basis of the preliminary analyses made in Mersin and in the light of a critical reading of the related literature, we could assume that the new glume type is:
1. a tetraploid hulled grain;
2. morphologically comparable to T. timopheevi;
3. biometrically similar to T. dicoccon;
4. T. timopheevi can be safely dismissed as the ancestor of the new glume type in spite of its morphological affinities because:
I) the current area of diffusion of T. timopheevi does not match with new glume type in archaeological contexts;
II) the sites documenting the new glume type apparently do not have any exchange with the region of Georgia, the current area of most probable diffusion of T. timopheevi.

According to these results, we hypothesise that the new glume type derives from T. araraticum, as T. timopheevi also does, and that the biometric affinity with T. dicoccon might reveal a common origin (the area actually overlaps that of T. dicoccoides, which represents its wild ancestor). The probable origin of the new glume type from T. araraticum allows us to hypothesize its affiliation to the AAGG genotype, and this would explain the morphological affinities of T. timopheevi with the new glume type.