



## Differences in the morphological characteristics of the land races of the soft and emmer wheat in relation to the modern varieties

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For the organic farmers there is important question which varieties of wheat are right for organic farming in Less Favoured Areas. Modern varieties of wheat are bred in the conditions of conventional (high input) farming. That is why the organic farmers asked about the suitability of land races of soft wheat (*Triticum aestivum* L.) or different species like emmer wheat grown in the past (*Triticum dicoccum* SCHUEBL). The paper results from the study of fourty land races, two intermediate and ten modern varieties of soft wheat in comparison to ten land races of emmer wheat at two locations in the Czech Republic. We evaluated tuft shape, length of plant, length and width of flag leaf, length and density of spike and awnedness. The modern varieties of soft wheat are characterised by a high level of uniformity. Their tuft shape is erect or semi-erect and length of plant is 60-70 cm, it does not rise the weed competitiveness. On the other hand, they have a medium or long flag leaf whose width is narrow or medium. Length of spike is medium or long. On the other hand, emmer wheat land races have the same tuft shape as forgoing modern varieties. Length of plant (89-119 cm) is the positive aspect of the weed competitiveness. Their flag leaf is narrow, but it is compensated by its length. The spike is shorter than the spike of modern varieties of soft wheat, but it is effectively compensated by an increased density. Intermediate wheat land races are characterised by loosely spreading tuft shape which puts the weeds down, but on the other hand, it favours the mildew because of the microclimate of soil. Its flag leaf is very short and narrow. Length of spike is medium and it is lax dense. The group of land races of soft wheat is characterised by a high diversity. The tuft shape is most frequently semi-erect. The length of plant varies from 60 to 120 cm, it usually ranges from 90 to 110 cm. Flag leaf is usually long or very long, but its width is very narrow or narrow. The spike is often long, but lax dense. Some of the evaluated varieties of landraces are proved to be suitable for organic farming from the point of view of the morphological characteristics.