INTRODUCTION

It has long been recognized that plants can be used as bioindicators to reflect certain properties of the environment (e.g. Kolkwitz and Marsson 1902, Iversen 1936, Ellenberg 1948, 1950). The most popular, but at the same time most controversial method of making use of bioindication is the application of relative ecological indicator values, henceforth EIVs (Diekmann 2003). Species receive scores (i.e. indicator values) according to their realized ecological optima along different environmental gradients such as temperature, light, or soil moisture (Ewald 2003). Later, site conditions can be estimated on the bases of their species composition and the EIVs of the species. Several studies have shown that EIVs provide a reliable estimate of site conditions, because estimated values correlate well with the actual (instrumentally measured) values of the indicated environmental factors (e.g. Diekmann 1995, Barczi et al. 1997, Schaffers and Sýkora 2000, Dzwonko 2001). In addition, the most appropriate weighting methods and cor-