

Theoretical and practical problems raised by identification of plant nematodes are discussed. It is shown that traditional identification devices (dichotomous and tabular keys) are useful only for expert identifiers. An alternate system, using computer artificial intelligence (expert-system) is proposed. The new identification method, which could be built at the end of a four-year study, could be used by nematologists with a minimum level of expertise (to be defined during the study). It would help teaching as well as routine identification. California Department of Food & Agriculture, Analysis & Identification, Room 340, 1220 N Street, Sacramento, CA 95814.