RYSS, A<sup>1</sup>, VIEIRA, P.<sup>2</sup>, MOTA, M.<sup>2</sup>, and KULINICH, O.<sup>3</sup>

The Order Aphelenchida contains several genera of economic importance, namely *Aphelenchoides* and *Bursaphelenchus*. Nematode species belonging to these 2 genera frequently co-habit with other genera such as *Laimaphelenchus*. It is therefore important to clearly distinguish them, as well as understand the group's biodiversity. A computerized, or e-key, for the genus *Laimaphelenchus* Fuchs has been developed in the BiKey Identification system (Dianov & Lobanov, 1996-2004). The e-key includes 14 species and 34 characters (from 2 to 6 character states each). It also includes the built-in algorithm ranging characters according their diagnostic values to minimize the number of the diagnosis steps (average number of steps is 2.7; values are re-calculated at each step). The most important characters (as calculated by BiKey) are: length of posterior branch of the female genital system; excretory pore position; vulval anterior flap shape; number pairs of mail tale papillae; male bursa shape (ventral view); number of tail tip setae in female; female tail tip stub shape; presence of mucro on tail tip in male. Key is pictorial (image-operating), multientry, as other BiKey products.

<sup>&</sup>lt;sup>1</sup> Zoological Institute RAS, St. Petersburg, 199034, Russia; nema@zin.ru

<sup>&</sup>lt;sup>2</sup>Universidade de Évora, 7002-554 Évora, Portugal; <u>pvieira@uevora.pt</u>, <u>mmota@uevora.pt</u>

<sup>&</sup>lt;sup>3</sup>Institute of Parasitology, Leninsky prospect, 33, Moscow 119071, Russia; okulinich@hotbox.ru