

Supplemental material

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Table S1. References used to extract all the morphological information represented in Figure 2.

Organism	Crown eukaryotic group	References
<i>H. sapiens</i>	Opisthokonts	Sorokin, 1962, 1968; Anderson and Brenner, 1971; Dirksen, 1971; Anderson, 1972; Rieder et al., 1979; Vorobjev and Chentsov, 1982; Paintrand et al., 1992; Alieva and Vorobjev, 2004; Hagiwara et al., 2008
<i>C. elegans</i>	Opisthokonts	Perkins et al., 1986; Pelletier et al., 2006; Inglis et al., 2007
<i>D. melanogaster</i>	Opisthokonts	Kiefer, 1970; Callaini and Riparbelli, 1990; Callaini et al., 1997; Fuller, 1998; Todi et al., 2004
<i>A. microrhinus</i>	Opisthokonts	Baccetti et al., 1973; Riparbelli et al., 2009; Dallai et al., 2010
<i>N. vectensis</i>	Opisthokonts	Szollosi, 1964; Davis, 1969; Summers, 1972; Wood, 1979; Hwang et al., 2008
<i>M. brevicollis</i>	Opisthokonts	Hibberd, 1975; Leadbeater, 1987; Karpov and Leadbeater, 1998
<i>U. maydis</i>	Opisthokonts	Girbhardt, 1971; McLaughlin, 1971; Lu, 1978
<i>S. cerevisiae</i>	Opisthokonts	Moens and Rapport, 1971; O'Toole et al., 1999; Winey et al., 2005
<i>B. dendrophagellus</i>	Opisthokonts	Olson and Fuller, 1968; Powell, 1981; Longcore, 1999
<i>P. polycephalum</i>	Amoebozoa	Aldrich, 1968, 1969; Wright et al., 1980; Pagh, 1982; Wright and Moisand, 1982; Gely and Wright, 1985; Michel et al., 2003
<i>D. discoideum</i>	Amoebozoa	Moens, 1976; Ma et al., 1999; Ueda et al., 1999
<i>O. tauri</i>	Plants	Henderson et al., 2007; Palenik et al., 2007
<i>Chlorella</i>	Plants	Atkinson et al., 1971; Wilson et al., 1973
<i>C. reinhardtii</i>	Plants	Cavalier-Smith, 1974; Geimer and Melkonian, 2004
<i>A. thaliana</i>	Plants	Mineyuki, 2007
<i>Marsilea</i>	Plants	Mizukami and Gall, 1966; Myles, 1975; Hepler, 1976
<i>M. polymorpha</i>	Plants	Carothers and Kreitner, 1967, 1968; Moser and Kreitner, 1970; Kreitner and Carothers, 1976
<i>C. merolae</i>	Plants	Miyagishima et al., 2001; Nishida et al., 2005; Maruyama et al., 2007; Yagisawa et al., 2007
<i>L. tuzetae</i>	Alveolates	Schrevel and Besse, 1975; Kuriyama et al., 2005
<i>P. falciparum</i>	Alveolates	Aikawa et al., 1967; Sinden et al., 1976, 1978, 2010; Morissette and Sibley, 2002
<i>T. thermophila</i>	Alveolates	Dippell, 1968; Allen, 1969; Dute and Kung, 1978; Iftode and Fleury-Aubusson, 2003
<i>P. tetraurelia</i>		
<i>L. undulatum</i>	Stramenopiles	Manton et al., 1970; Heath and Darley, 1972
<i>Phytophthora</i>	Stramenopiles	Heath, 1974, 1980; Hemmes and Hohl, 1975; Eriksson and Laane, 1982; Hyde et al., 1991
<i>P. brassicae</i>	Rhizaria	Garber and Aist, 1979; Tanaka et al., 2001
<i>T. vaginalis</i>	Excavates	Ovcinnikov et al., 1974; Jemilohun, 1998; Ribeiro et al., 2002; Simpson, 2003; Briceux et al., 2007; Lee et al., 2009
<i>T. cruzi</i>	Discicristates	Woodward and Gull, 1990; Elias et al., 2007; Lacomble et al., 2009, 2010
<i>Leishmania</i>	Discicristates	al-Shammary et al., 1995; Gluenz et al., 2010; Molyneux et al., 1975; Wiese et al., 2003
<i>N. gruberi</i>	Discicristates	Dingle and Fulton, 1966; Fulton and Dingle, 1971

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