

**Bioelectric potentials of *Charophyta* cells**

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Bioelectric potentials are generated due to cell membranes. Two kinds of potentials can be distinguished: resting potential and action potential. Potentials of the *Charophyta* cells differ from analogical potentials of animal cells in value, time of duration, velocity of extending and participation of particular ions flowing through the membrane. Resting potentials are of the diffusion kind. Action potentials are explained by the increase in permeability of the membrane for certain kinds of ions. There remain some problems which have not been fully explained yet, e.g. selectivity of membranes, mobility of ions in the membranes, mechanisms acting in membranes in excited state etc.