

A New Laboratory Cultivation of *Paramecium bursaria* Using Non-Pathogenic Bacteria Strains

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Z. Naturforsch. **65c**, 479–482 (2010); received February 3/March 2, 2010

In most studies dealing with the laboratory cultivation of paramecia (*Paramecium bursaria*), *Klebsiella pneumoniae* bacteria are used to inoculate the medium. However, *Klebsiella pneumoniae* is a typical pathogen, and its use is always associated with a risk of infection. The aim of the present research was to examine non-pathogenic bacteria strains as components of the medium for *Paramecium bursaria*. The paramecia were incubated on lettuce infusions bacterized with different bacteria strains: *Bacillus subtilis* DSM 10, *Bacillus megaterium* DSM 32, *Escherichia coli* DSM 498, *Micrococcus luteus* DSM 348. A strain derived from the natural habitat of *Paramecium bursaria* was used as the control one. Experiments were conducted under constant light and in the dark. Paramecia cells were counted under a stereomicroscope on consecutive days of incubation. The obtained results show that the most intensive growth of *Paramecium bursaria* occurs in the presence of *Escherichia coli* DSM 498. The use of this strain as a component of the medium allows one to obtain a high number of ciliates regardless of the light conditions. It can be concluded that the *Paramecium bursaria* cultivation procedure can be modified by using the non-pathogenic bacteria strain *Escherichia coli* DSM 498 instead of *Klebsiella pneumoniae*.

Key words: *Paramecium bursaria*, Cultivation, Bacteria