

Trichoplax adhaerens

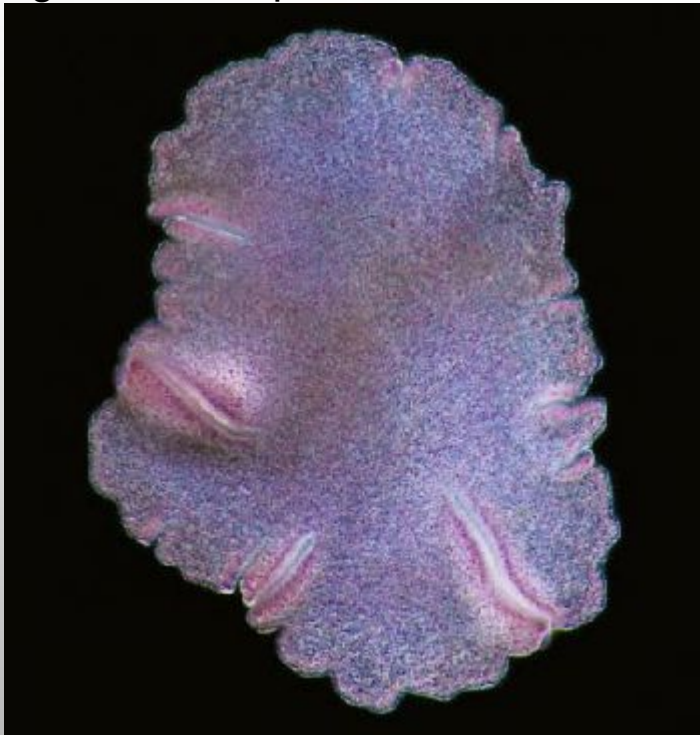


1. Introduction and bauplan
2. Biodiversity
3. The position in the Tree of Life

1. Introduction and bauplan

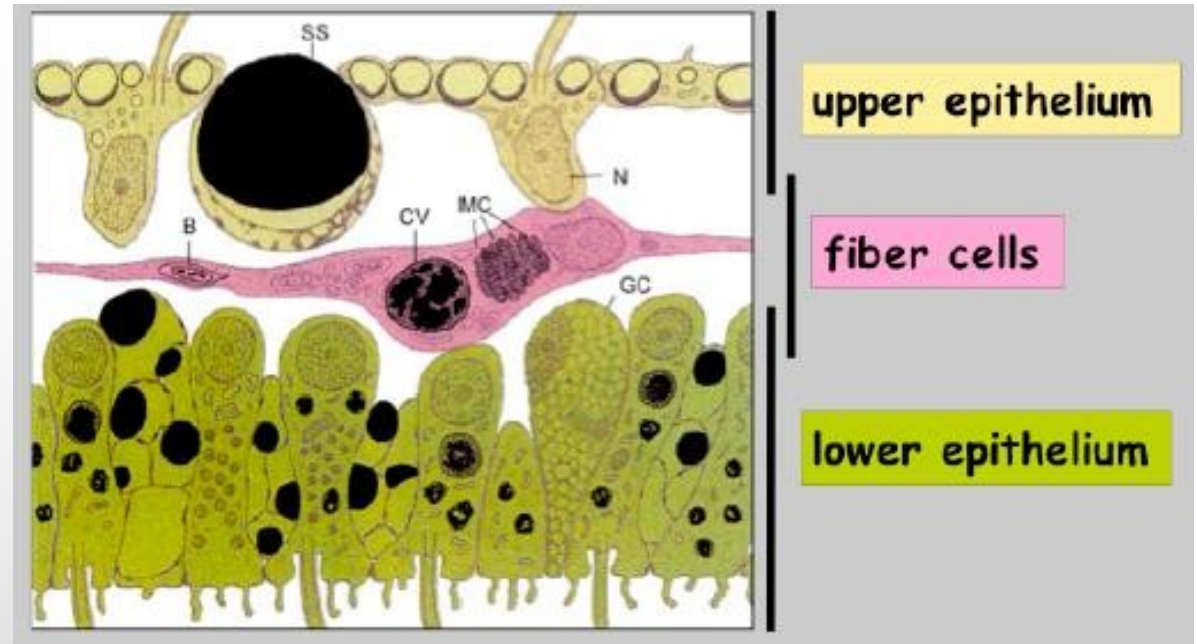


Picture left: *Trichoplax adhaerens*,
light microscope



source: www.ecolevol.de

Picture right:
The bauplan of *Trichoplax adhaerens*



Source: Schierwater, Eitel (2010)

2. Biodiversity

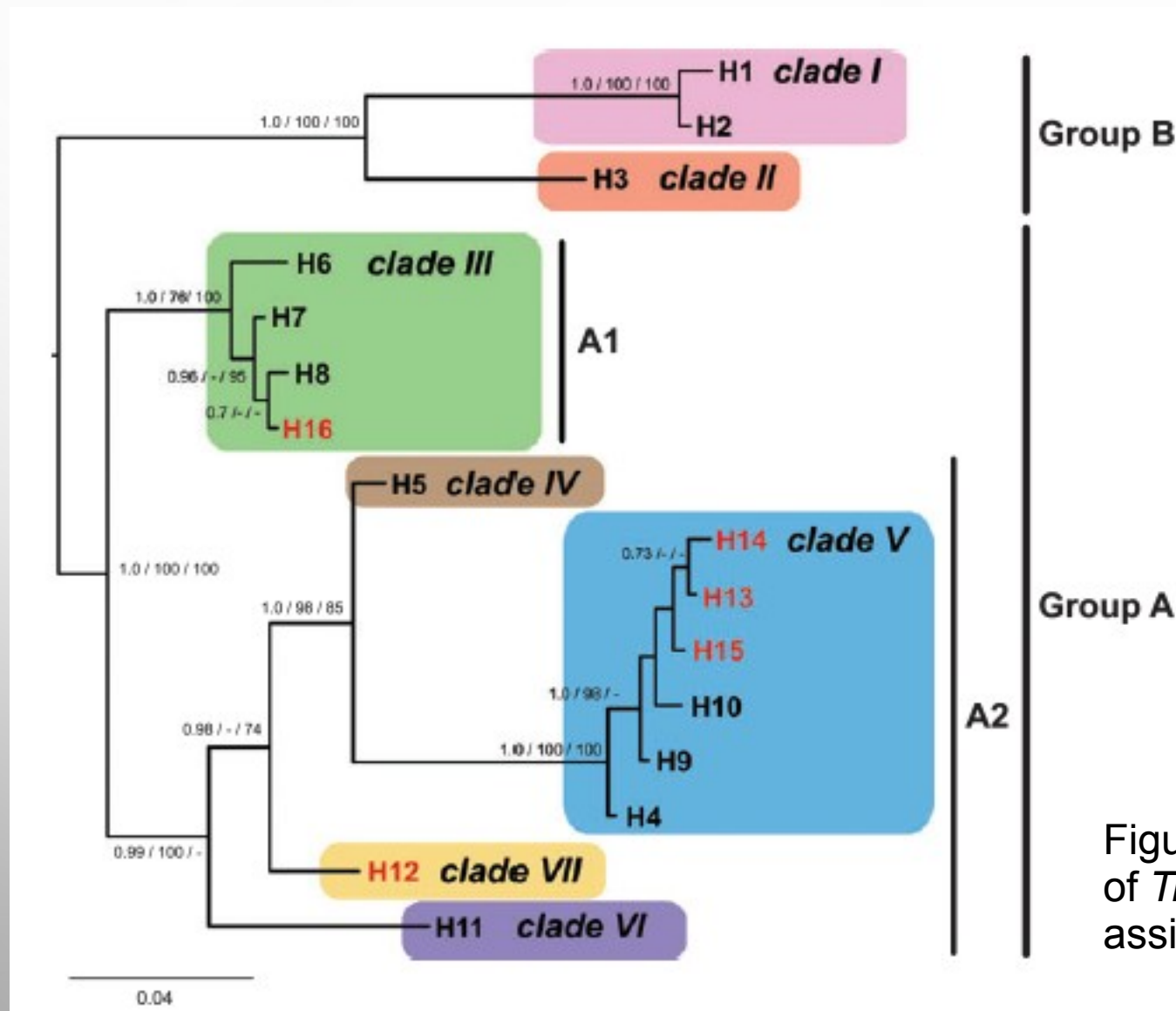


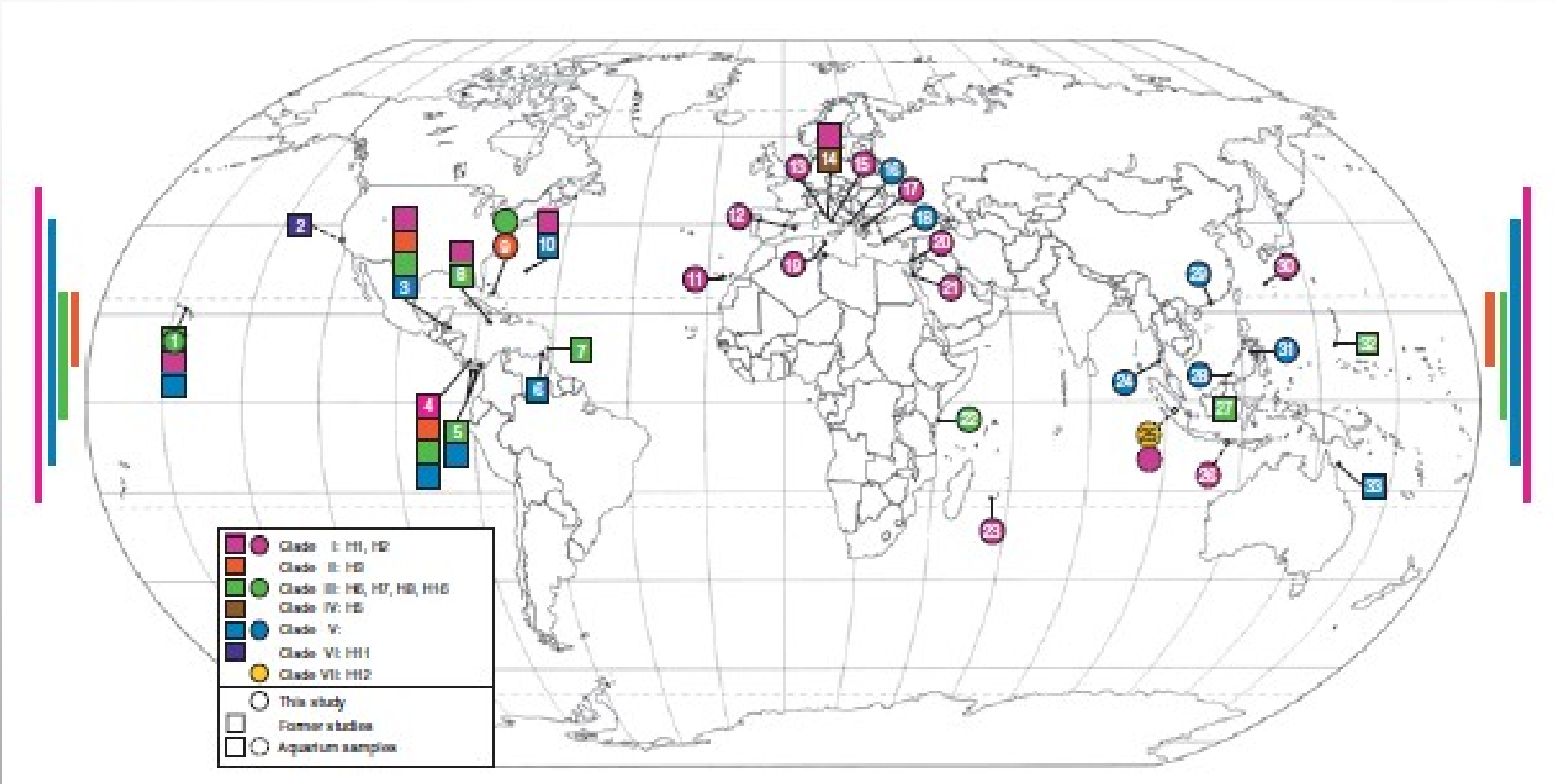
Figure: 16 different Haplotypes of *Trichoplax adhaerens*, assigned to 7 clades

Source: Schierwater, Eitel (2010)

2. Biodiversity

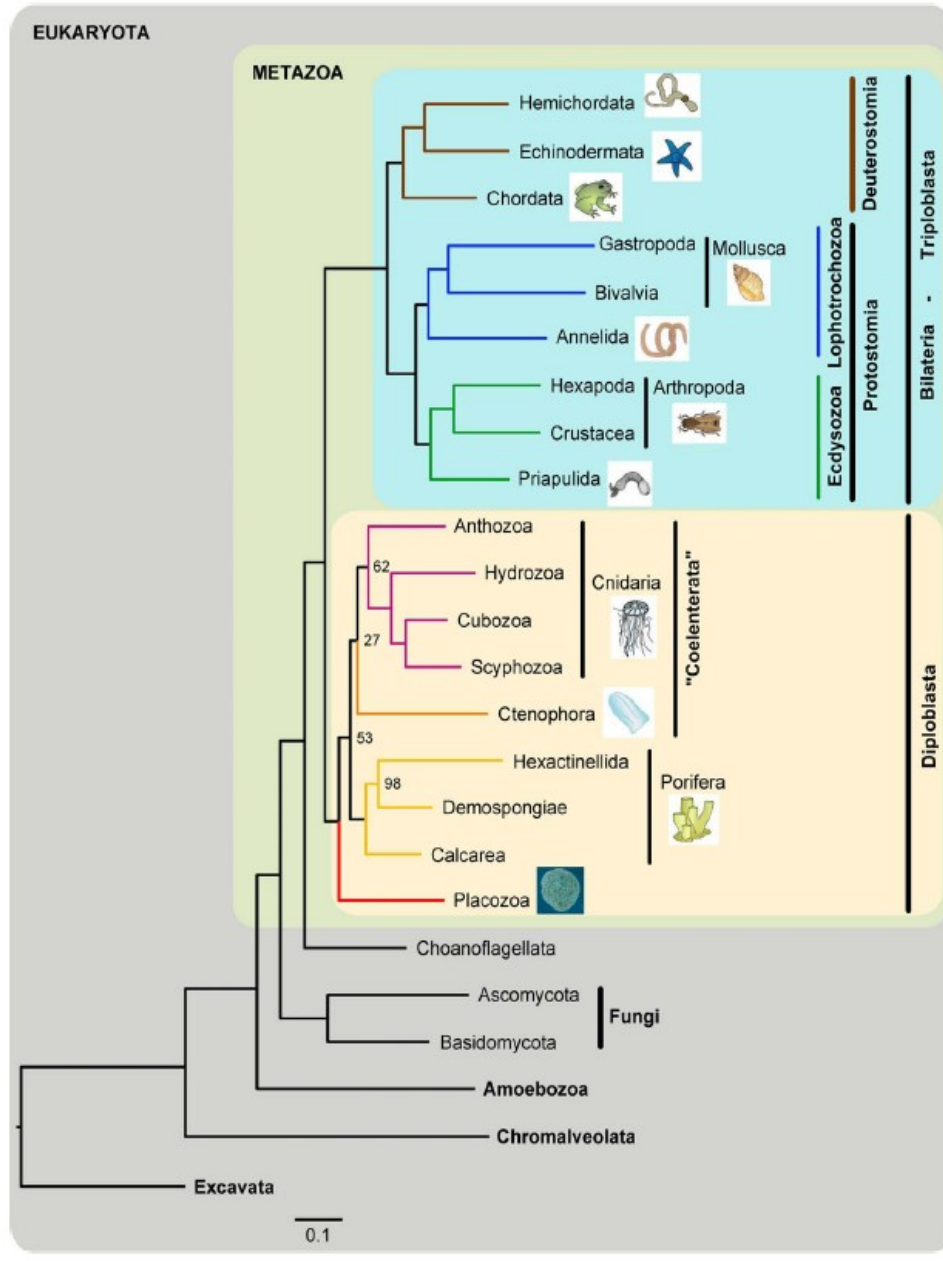
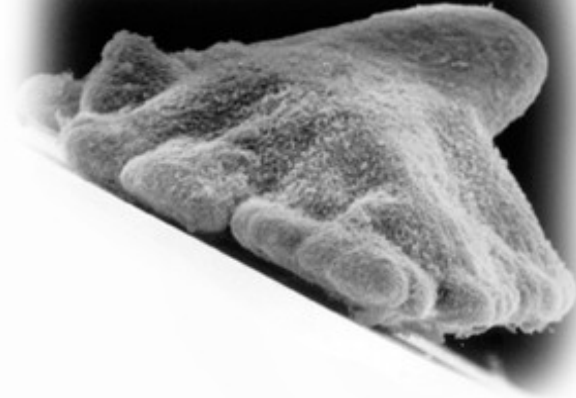


Figure: The spots, where the different clades are found



Source: Schierwater, Eitel (2010)

3. Position in the Tree of Life



Tree of Life:
Bilateria Diploblasta sister hypothesis

Source: Schierwater, Hardrys, DeSalle, et al (2009)

Summary



- Trichoplax has very simple bauplan (five cell-types)
- Very high genetic diversity
- Maybe the most basal Metazoa



Thank you, for your attention

References:

- Schierwater B, Kolokotronis S, Eitel M, DeSalle R, The Diploblast Bilateria Sister hypothesis. Comm. & Integr. Biology, 2009
- Schierwater B, My favorite animal *Trichoplax adhaerens*. BioEssays, 2005
- Schierwater B, Dellaporta S, et al, The *Trichoplax* genome and the nature of placozoans. Nature 2008
- Schierwater B, Eitel M, The phylogeography of the Placozoa suggests a taxon-rich phylum in tropical and subtropical waters, Molecular ecology (2010)
- Schierwater B, Hadrys H, Dellaporta S, DeSalle R, Concentrated Analysis Sheds Light on Early Metazoan Evolution and Fuels a Modern „Urmetazoan“ Hypothesis, PLOS Biology (2009)