

Phylum Placozoa

One known species: *Trichoplax adhaerens*

but newer genetic analysis indicates there might be up to 8 species

one of simplest animals

→ least DNA/cell than any other animal

small assymetrical disc-shaped animal

barely visible to naked eye 2-3 mm

→ few 1000 cells total

no tissues or organs,

little cell differentiation

yet all other characteristics place it clearly in the animal kingdom

phylum is based on a single species; *Trichoplax*

first discovered in 1883 from marine aquarium
→ until 1971 thought it was a larval cnidarian

only known from walls of marine aquaria until 1980's, when they were found throughout the Pacific Ocean

has dorsal and ventral; but no front, back or sides
→ dorsal of flat ciliated cells and spherical cells
→ ventral of columnar ciliated cells and gland cells

between dorsal and ventral layer is fluid filled cavity with some fibrous cells that can cause animal to contract

can make amoeba like movements;
but movement mostly due to ventral cilia
→ moves in any direction

probably feeds on algae and organic matter by covering it and secreting enzymes then absorbing the digested material

reproduces

asexual: by binary fission & budding

sexual: (has not been observed)