

Figure 1. Oxygen consumption of *Cupriavidus necator* ATCC 17699 and *Bacillus subtilis* BBK006 treated with different sophorolipid biosurfactants. **A.** Cells of *Cupriavidus necator* ATCC 17699 (■) and *Bacillus subtilis* BBK006 (●) in absence of treatment. **B.** Cells of *Cupriavidus necator* ATCC 17699 in presence of sophorolipids S1 (▲) and sophorolipids

S2 (▼) and *Bacillus subtilis* BBK006 treated with S1 (■) and S2 (●). Treatment concentrations were 5% v/v.

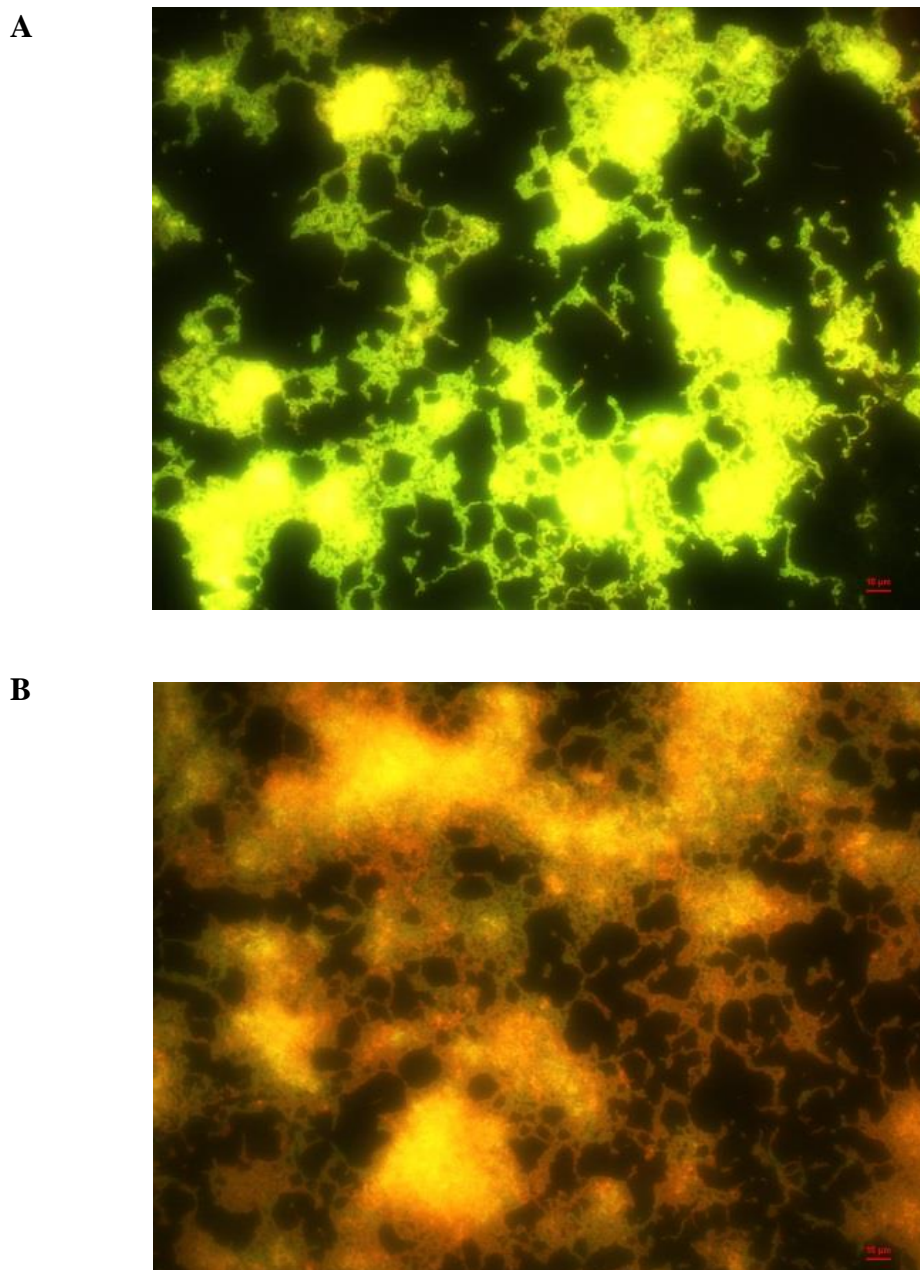


Figure 2. Biofilm formation by *Bacillus subtilis* BBK006 on coverslips. Cells were stained with Syto9® and observed using a fluorescence microscope at 40X. **(A)** *Bacillus subtilis* BBK006 biofilms after 48h as a control. **(B)** After 30min treatment in the presence of Sophorolipids 5 % v/v on 48h preformed biofilms. The scale bar represents 10μm.

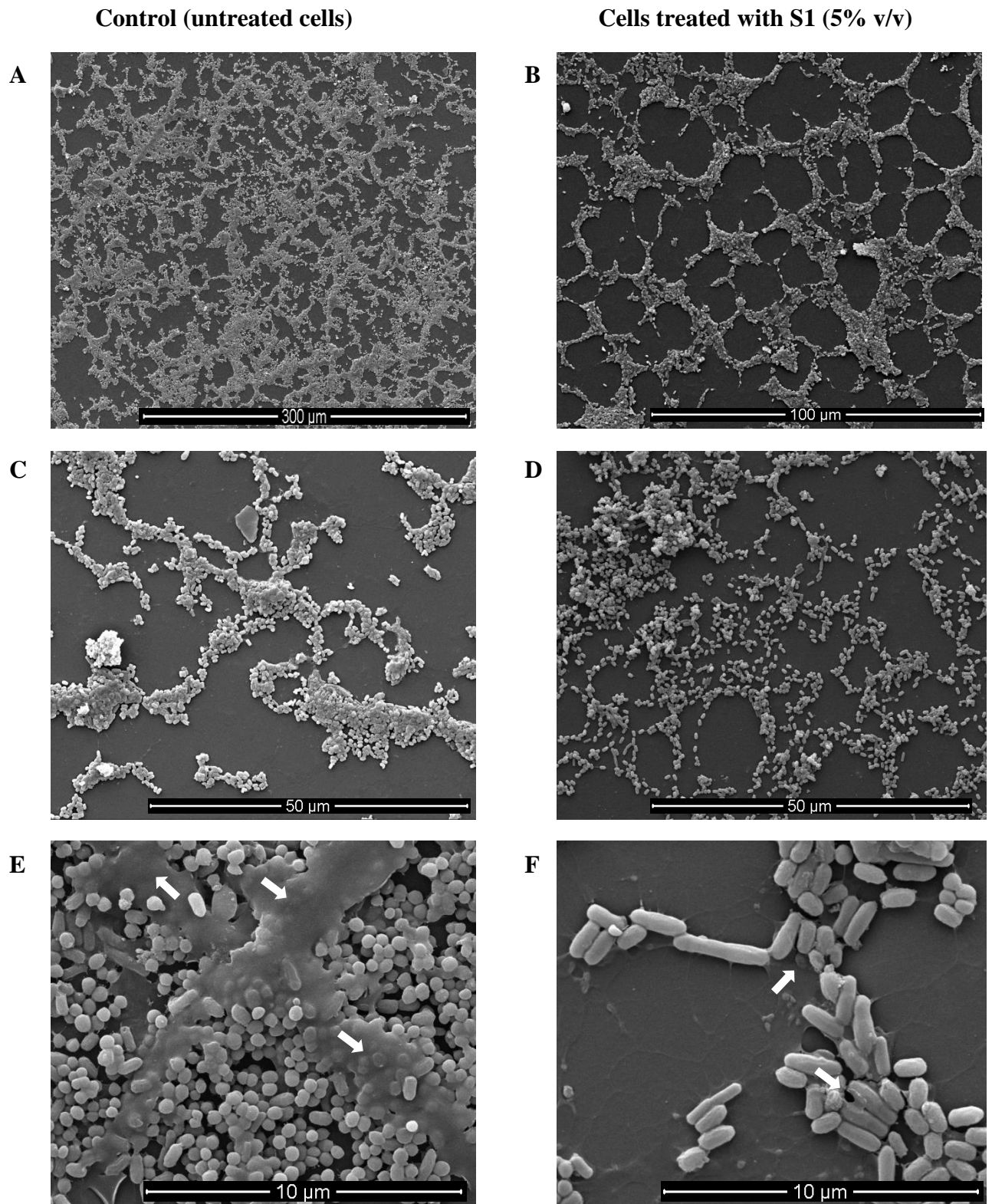


Figure 3. Scanning electron micrographs showing attachment and biofilm formation by *Bacillus subtilis* BBK006 (A) and a mixed culture between *Bacillus subtilis* BBK006 and *Staphylococcus aureus* ATCC 9144 (C and E) with an expose of the EPS substance

encapsulating the cells (*arrows*) and cells of *Bacillus subtilis* BBK006 (B) and a mixed culture of *Bacillus subtilis* BBK006 and *Staphylococcus aureus* ATCC 9144 (D and F) treated with S1 5% v/v showing cells disruption with outporing of cytoplasmatic content (*arrows*). The magnification for A = 300µm, B = 100µm, C and D = 50µm and E and F = 10µm. Note the extracellular matrix encapsulating cells in images E and F of *Bacillus subtilis* BBK006 and *Staphylococcus aureus* ATCC 9144 (D and F) treated with S1. The magnification for A = 300µm, B = 100µm, C and D = 50µm and E and F = 10µm.