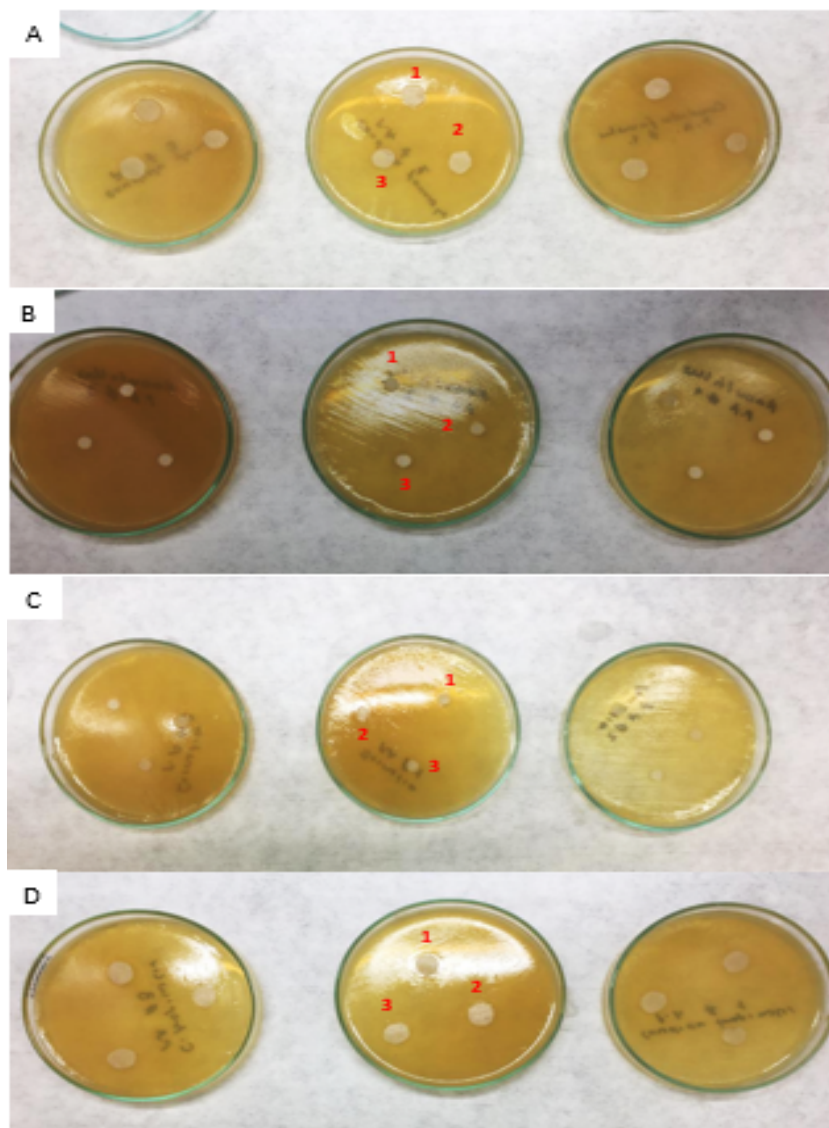


Supplementary Material

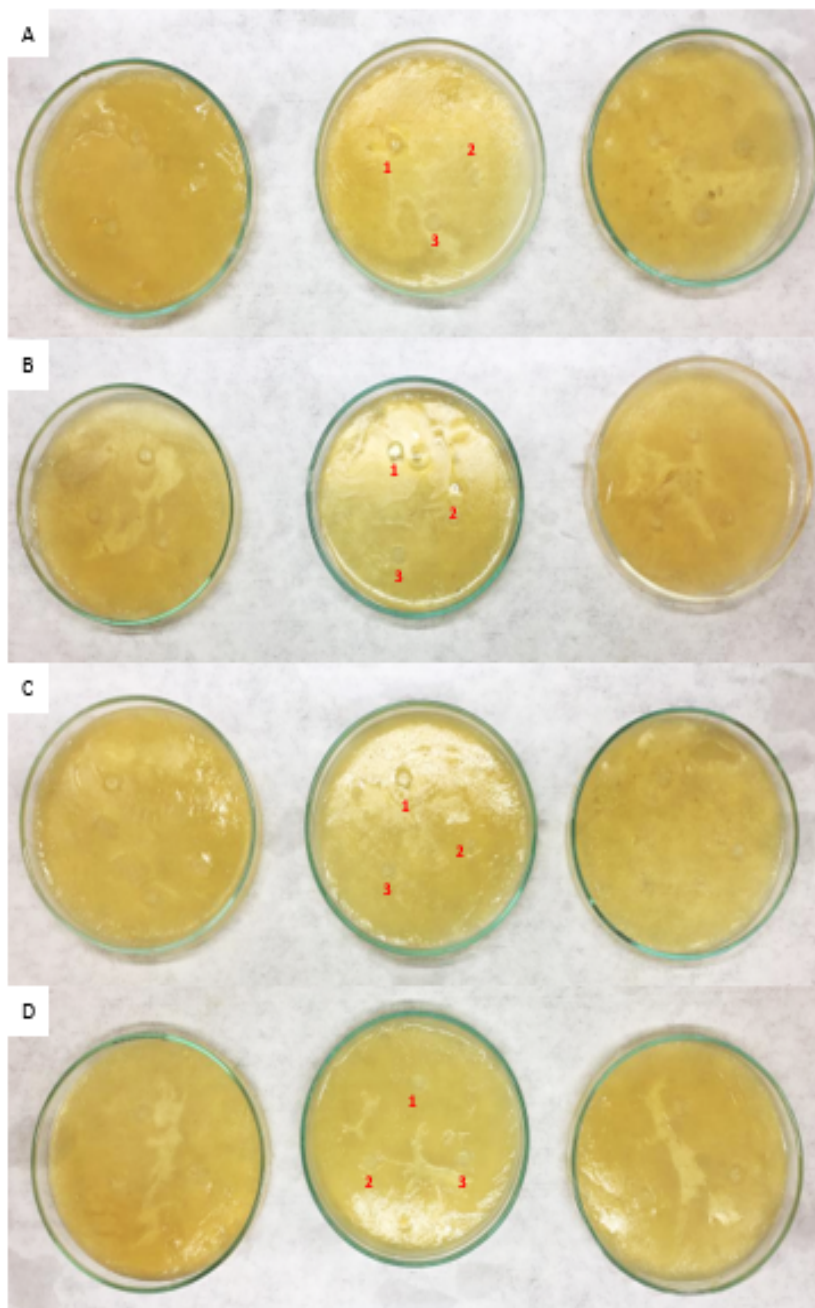
Bioreduction *in vitro* of hexavalent chromium using a microbial consortium

Biorreducción *in vitro* de cromo hexavalente utilizando consorcios microbianos

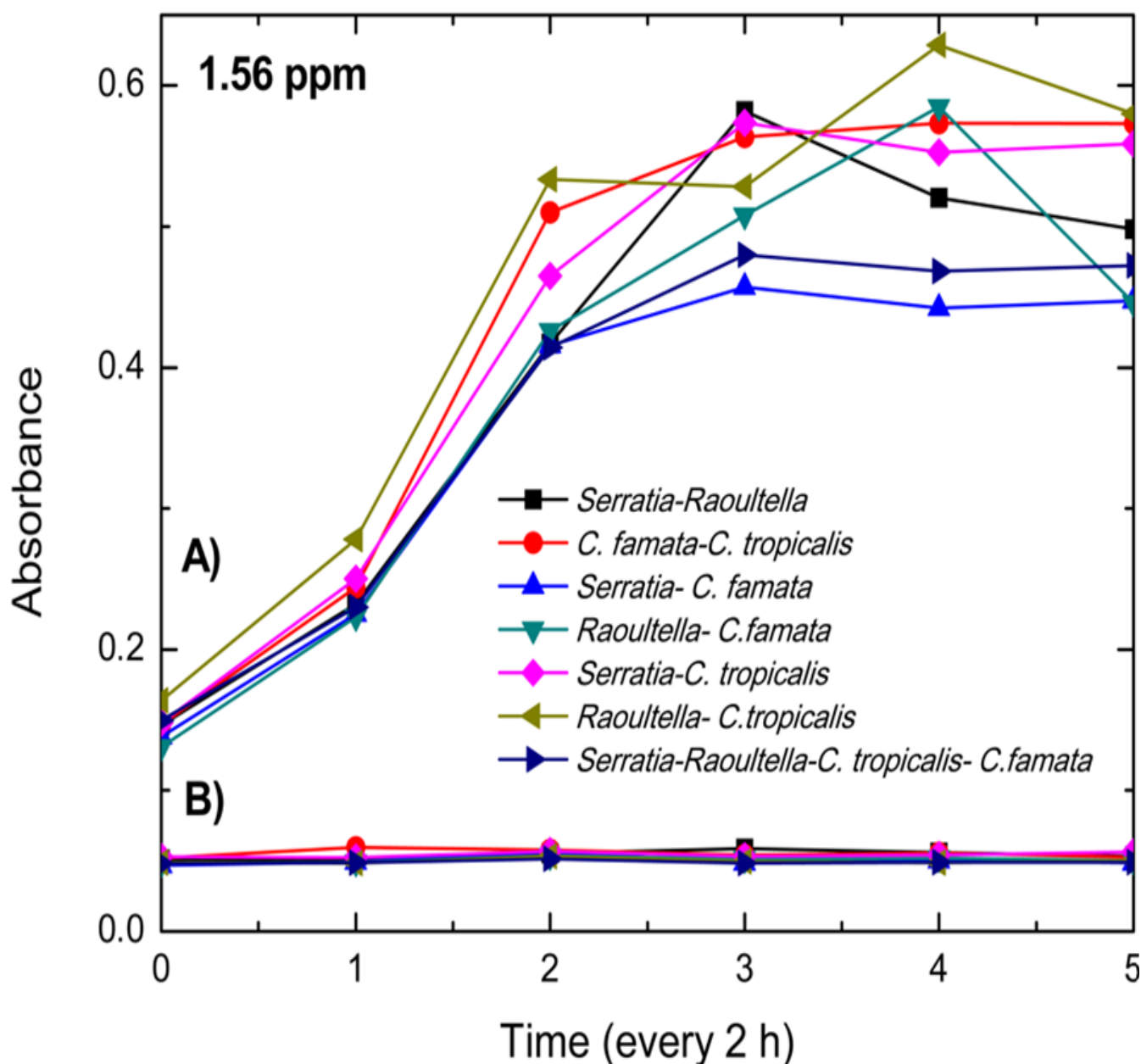
Stefany Serna-Toro^{1*}, Fabiana María Lora-Suarez¹, Nelsy Loango-Chamorro¹



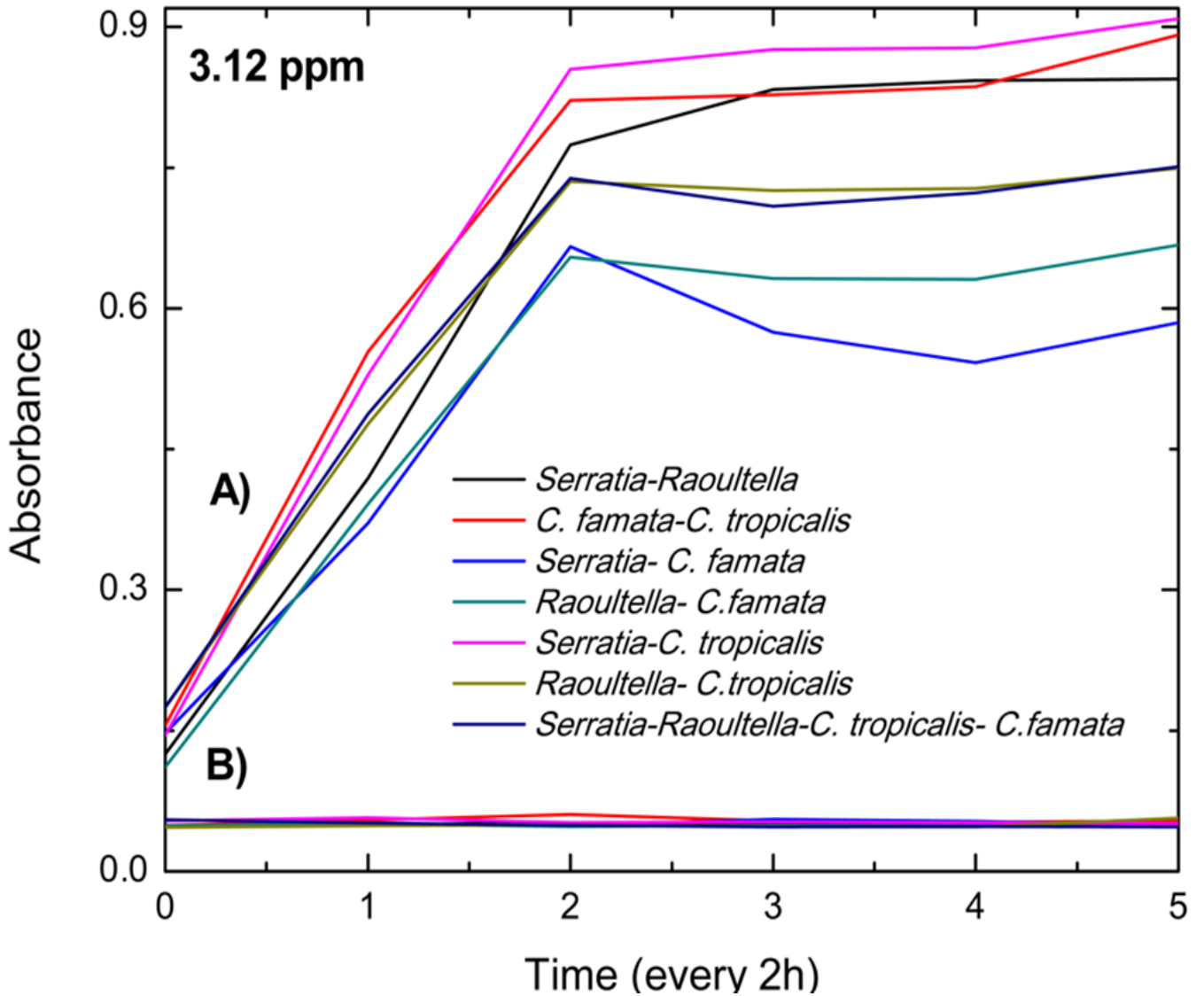
Annex 1. Simultaneous inhibition tests. **A.** Mass seeding of *C. famata* against antagonistic sensi-discs of 1. *Raoultella* sp. 2. *Serratia* sp. 3. *C. tropicalis* **B.** Mass seeding of *Raoultella* sp. against antagonistic sensi-discs of 1. *C. famata* 2. *Serratia* sp. 3. *C. tropicalis* **C.** Mass seeding of *Serratia* sp. against antagonistic sensi-discs of 1. *C. famata* 2. *Raoultella* sp. 3. *C. tropicalis* **D.** Mass seeding of *C. tropicalis* against antagonistic sensi-discs of 1. *C. famata* 2. *Raoultella* sp. 3. *Serratia* sp.



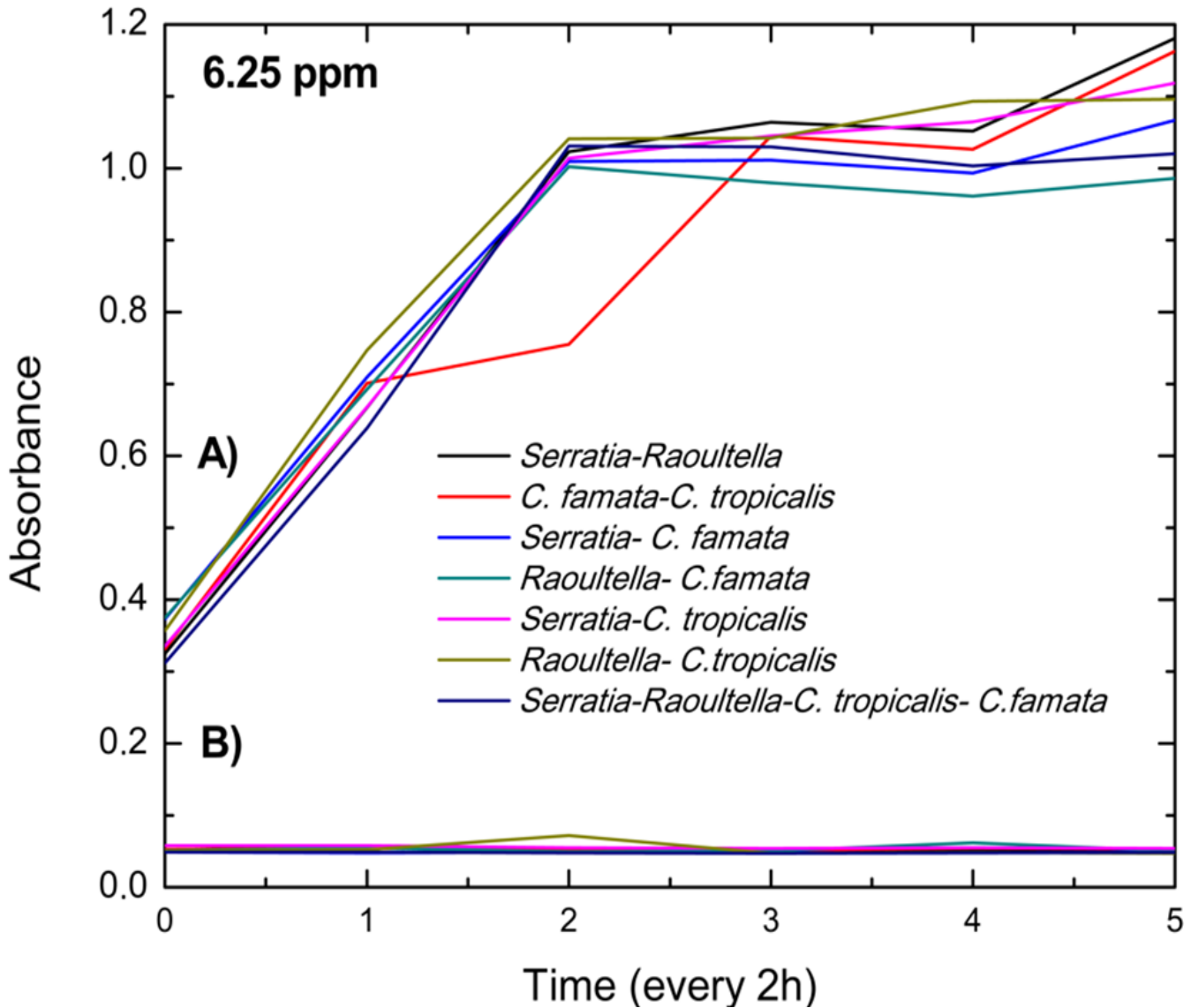
Annex 2. Diffusion test on agar A. Mass seeding of *C. tropicalis* in inoculating with the antagonists 1. *Raoultella* sp. 2. *Serratia* sp. 3. *C. famata* B. Mass seeding of *C. famata* inoculating with antagonists 1. *Raoultella* sp. 2. *Serratia* sp. 3. *C. tropicalis* C. Mass seeding of *Serratia* sp. inoculated with antagonists 1. *Raoultella* sp. 2. *C. famata*. *C. tropicalis* D. Mass seeding of *Raoultella* sp. inoculated with antagonists 1. *Serratia* sp. 2. *C. famata* 3. *C. tropicalis*.



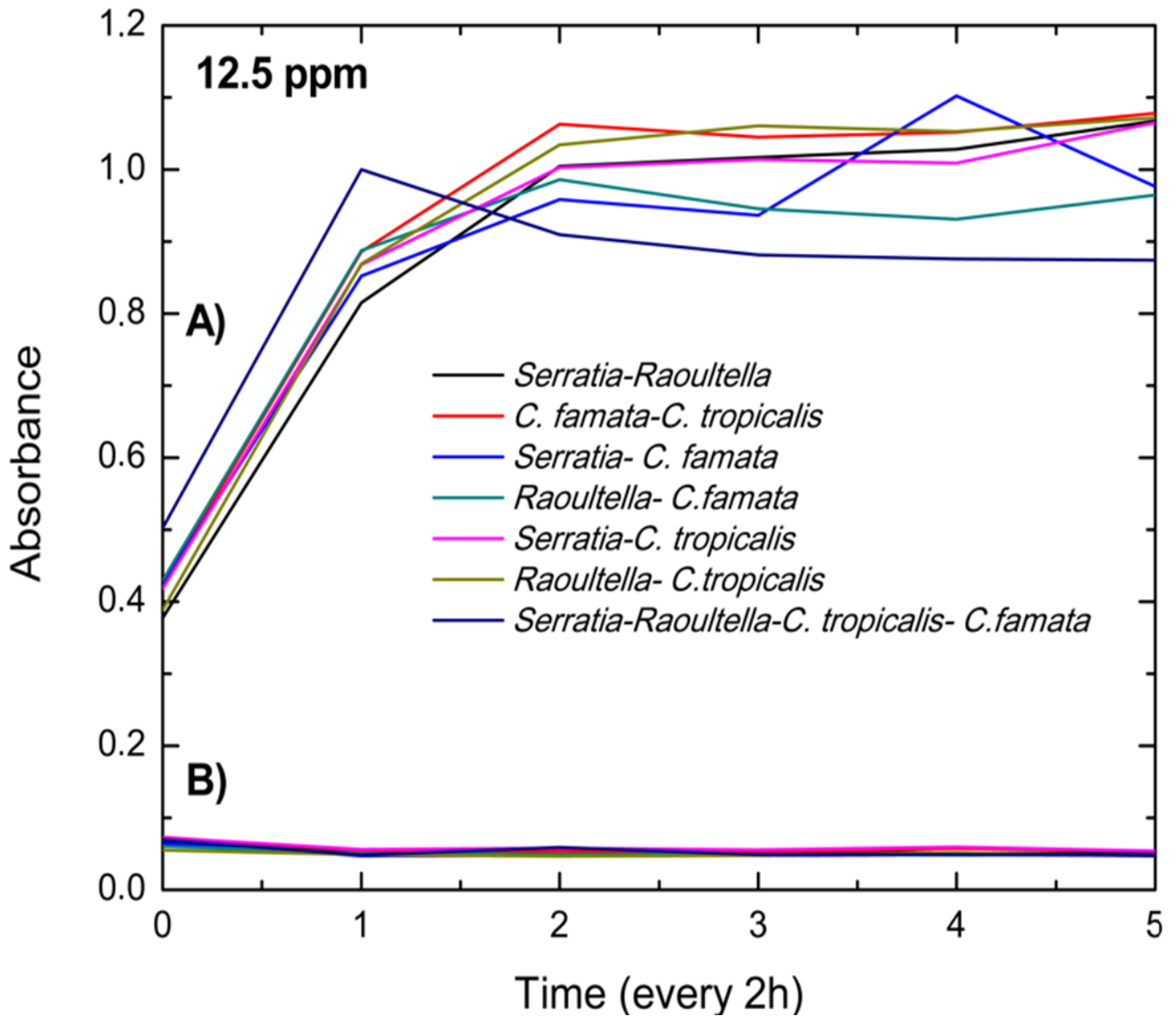
Annex 3. Absorbance values obtained for each of the established microbial consortia *Serratia* sp.-*Raoultella* sp.; *C. famata*- *C. tropicalis*; *Serratia* sp.- *C. famata*; *Raoultella* sp.-*C. famata*; *Serratia*-*C. tropicalis*; *Raoultella* sp.-*C. tropicalis* and *Serratia* sp.-*Raoultella* sp.-*C. tropicalis*-*C. famata*. A. represents the growth curves of each consortium. B. represents the adaptation to 1.56 ppm chromium (VI) concentration in each consortium. The numbers 0, 1, 2, 3, 4 and 5 are equivalent to 0, 2, 4, 6, 8 and 10 hours of adaptation, respectively.



Annex 4. Absorbance values obtained for each of the established microbial consortia *Serratia* sp.-*Raoultella* sp.; *C. famata- C. tropicalis*; *Serratia* sp.- *C. famata*; *Raoultella* sp.-*C. famata*; *Serratia- C. tropicalis*; *Raoultella* sp.-*C. tropicalis* and *Serratia* sp.-*Raoultella* sp.-*C. tropicalis- C. famata*. A. represents the growth curves of each consortium. B. represents the adaptation to 3.12 ppm chromium (VI) concentration in each consortium. The numbers 0, 1, 2, 3, 3, 4 and 5 are equivalent to 0, 2, 4, 6, 8 and 10 hours of adaptation, respectively.



Annex 5. Absorbance values obtained for each of the established microbial consortia *Serratia* sp.-*Raoultella* sp.; *C. famata- C. tropicalis*; *Serratia* sp.- *C. famata*; *Raoultella* sp.-*C. famata*; *Serratia- C. tropicalis*; *Raoultella* sp.-*C. tropicalis* and *Serratia* sp.-*Raoultella* sp.-*C. tropicalis- C. famata*. **A.** represents the growth curves of each consortium. **B.** represents the adaptation to 6.25 ppm chromium (VI) concentration in each consortium. The numbers 0, 1, 2, 3, 4 and 5 are equivalent to 0, 2, 4, 6, 8 and 10 hours of adaptation, respectively.



Annex 6. Absorbance values obtained for each of the established microbial consortia *Serratia* sp.-*Raoultella* sp.; *C. famata*- *C. tropicalis*; *Serratia* sp.- *C. famata*; *Raoultella* sp.-*C. famata*; *Serratia*-*C. tropicalis*; *Raoultella* sp.-*C. tropicalis* and *Serratia* sp.-*Raoultella* sp.-*C. tropicalis*-*C. famata*. **A.** represents the growth curves of each consortium. **B.** represents the adaptation to 12.5 ppm chromium (VI) concentration in each consortium. The numbers 0, 1, 2, 3, 4 and 5 are equivalent to 0, 2, 4, 6, 8 and 10 hours of adaptation, respectively.