

Figure S1 Methodology for CMC determination



Figure S2 CMC values of fish-waste-based biosurfactants generated by *Bacillus Substilis* N3-1P

Table S1 Proximate composition of fish wastes

|  |  |  |
| --- | --- | --- |
| Constituent | Fish Liver | Fish Head |
| Moisture (%) | 71.3 | 58.9 |
| Ashes (%) | 4.45 | 10.05 |
| Protein (%) | 16.51 | 13.47 |