

Table 1. MS fragmentation of the fatty acid mixture used as standard

Product	RT (min)	MW (g/mol)	Fragment ions (m/z)
linolenic acid	10.35	278.43	277.2 [M-H] ⁻ , 255.2, 227
linoleic acid	10.99	280.45	279.2 [M-H] ⁻ , 255.0
oleic acid	11.65	282	281.2 [M-H] ⁻ , 255.0
palmitic acid	11.46	256.42	255.2 [M-H] ⁻
ricinoleic acid	8.82	298	296.9 [M-H] ⁻ , 279 [M-H ₂ O] ⁻ , 183.0 (cleavage in α to 12-OH)
stearic acid	12.26	284	283.2 [M-H] ⁻
MHOD (-oleic)	8.99-9.05	298	297[M-H] ⁻ , 279 [(M-H ₂ O)-H] ⁻ , 154.9 (indicating double bond at C8)
DHOD (-oleic)	6.60-6.69	314	313.2 [M-H] ⁻ , 295.2 [(M-H ₂ O)-H] ⁻ , 277 [(M-2xH ₂ O)-H] ⁻

Table 2. MS fragments of hydroxylated products detected in the organic from the supernatant of the feed submerged aerated culture of *Pseudomonas* 42A2 after 70 hours of incubation.

Product	RT (min)	MW (g/mol)	Fragment ions (<i>m/z</i>)
MHOD (10-OH Δ^8)	9.02	298	297[M-H] ⁻ , 279 [(M-H ₂ O)-H] ⁻ , 154.9, indicating 10-OH
MHOD (9-OH $\Delta^{10,12}$)	8.42	296	295[M-H] ⁻ , 277 [(M-H ₂ O)-H] ⁻ , 171 [(M-(CH=CH-CH=CH-(CH ₂) ₄ -CH ₃)-H] ⁻ , indicating 9-OH
MHOD (13-OH $\Delta^{9,11}$)	8.42	296	295[M-H] ⁻ , 277 [(M-H ₂ O)-H] ⁻ , 195[(M-(CHO-(CH ₂) ₄ -CH ₃)-H] ⁻ , indicating 13-OH
THOD (9,10,13)	4.78	330	329 [M-H] ⁻ , 311.2 [(M-H ₂ O)-H] ⁻ , 293 [(M-2xH ₂ O)-H] ⁻ , 229.0, 171.1, 127 [(M-CHO-CHO-(CH ₂) ₇ -COOH)-H] ⁻
THOD (9,12,13)	5.28-5.65	330	329 [M-H] ⁻ , 311.2 [(M-H ₂ O)-H] ⁻ , 293 [(M-2xH ₂ O)-H] ⁻ , 229.0, 199.2, 171.1, 129 330 [(M-CH=CH-CHO-(CH ₂) ₇ -COOH)-H] ⁻

Table 3. Minimal inhibition concentration of the mono-, di- and trihydroxy fatty acids accumulated in the culture medium of the submerged aerated culture of *Pseudomonas* 42A2 from linoleic acid against different bacterial and fungal strains.

Microorganism	CMI ($\mu\text{g/mL}$)
<i>Bacillus cereus</i> var mycoides CECT 193	140
<i>Bacillus subtilis</i> ATCC 6333;	64
<i>Enterococcus hirae</i> ATCC 10541	32
<i>Micrococcus luteus</i> ATCC 9341	64
<i>Mycobacterium phlei</i> ATCC 41423	512
<i>Staphylococcus aureus</i> ATCC 9341	128
<i>Arthroderma uncinatum</i> ATCC 15082	32
<i>Aspergillus niger</i> ATCC 16404	140
<i>Aspergillus repens</i>	140
<i>Candida albicans</i> ATCC 10231	256
<i>Macrophomina phaseolina</i> 48561	32
<i>Penicillium chrysogenum</i> ATCC 9480	140
<i>Penicillium funiculosum</i> CECT 2914	32
<i>Trycophyton mentagrophites</i> ATCC 18748	64
<i>Verticillium dahliae</i> 49507/A	32