Table S1

The biochemical properties of strain DG-02

Characteristics	Results	Characteristics	Results
Glycerol	+	Maltose	+
Erythritol	–	Ribose	+
L-Arabinose	–	D-Arabinose	–
L-Xylose	–	D-Xylose	–
Trehalose	+	Adonitol	+
Fructose	+	Mannose	–
Sorbose	–	Dulcitol	–
Inose	–	Rhamnose	–
Galactose	–	Amygdalin	–
Arbutin	+	Esculin	+
Salicine	+	Melibiose	–
Inulin	–	Melezitose	–
5-Keto-D-gluconate	–	2-Keto-D-gluconate	–
Cellobiose	+	Lactose	–
Saccharate	–	Amylose	+
Raffinose	–	Glycogen	+
Gentiobiose	–	Turanose	–
Lyxose	–	Tagatose	–
D-Fucose	–	L-Fucose	–
L-Arabitol	–	D-Arabitol	–
Gluconate	+	Sorbitol	–
Methyl α-D-mannoside	–	Methyl β-D-xyloside	–
Methyl α-D-glucoside	–	N-acetyl glucosamine	+

+, tested positive; −, tested negative

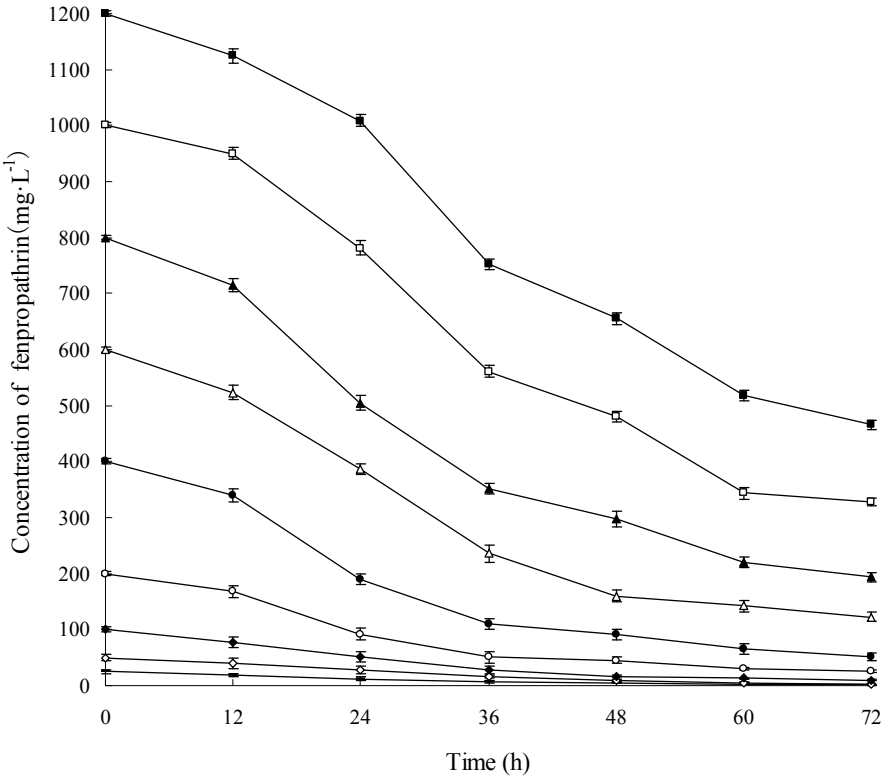


Figure S1. Degradation kinetics of fenpropathrin at different initial concentrations by *Bacillus* sp. DG-02. Symbol: -, 25 mg·L^{-1}; □, 50 mg·L^{-1}; □, 100 mg·L^{-1}; ○, 200 mg·L^{-1}; ●, 400 mg·L^{-1}; □, 600 mg·L^{-1}; ▲, 800 mg·L^{-1}; □, 1000 mg·L^{-1}; ■, 1200 mg·L^{-1}. Error bars indicate the standard deviation of three replicates.

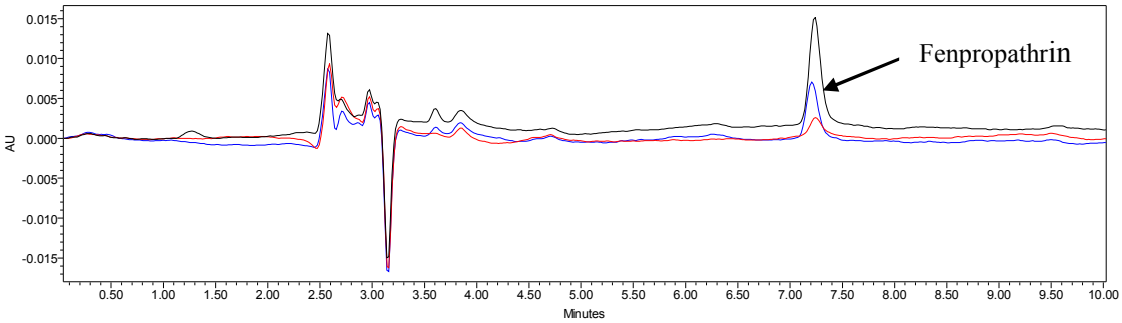
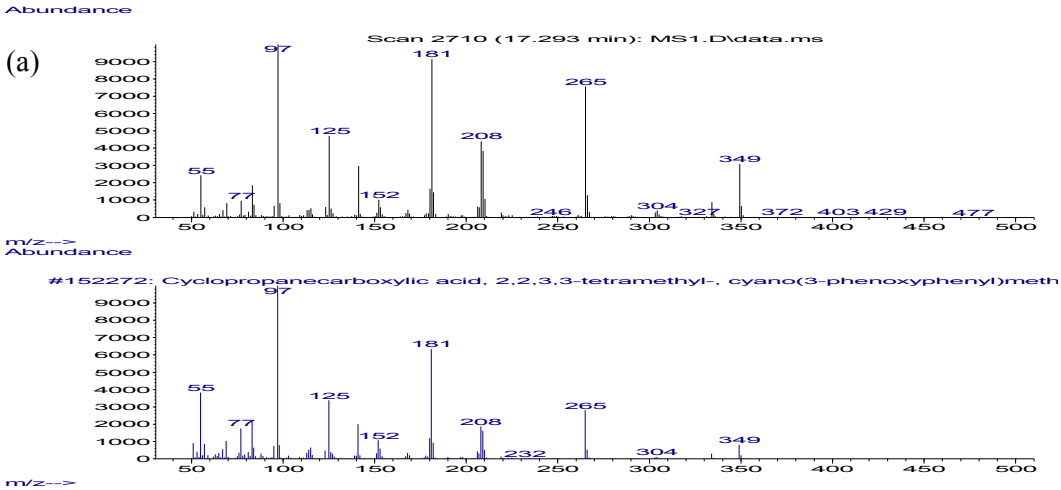
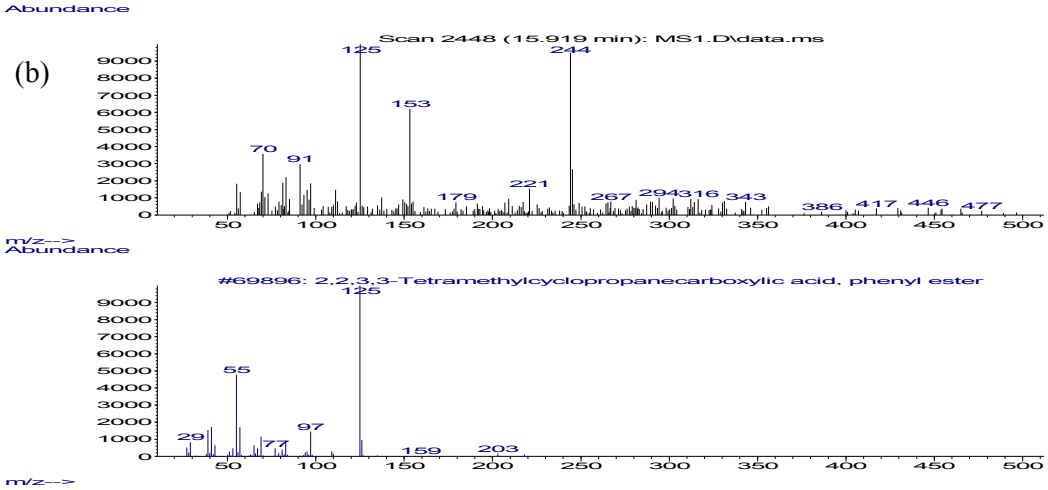


Figure S2. The changes in fenpropathrin peak area over time

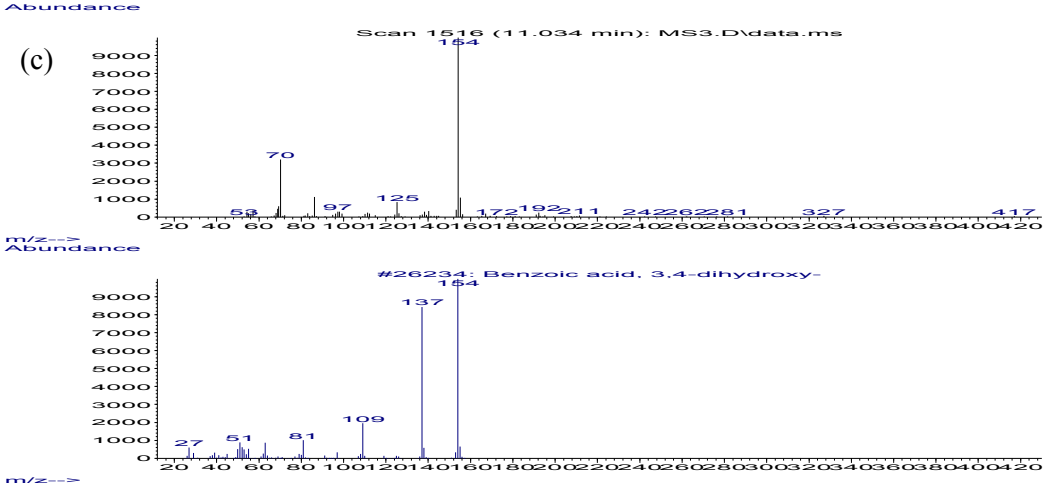
(a)


Abundance
Scan 2710 (17.293 min): MS1.D\data.ms
97
181
265
125
208
349
55
77
152
246
304
327
372
403
429
477
m/z-->
Abundance
#152272: Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)meth
97
181
55
125
265
77
208
152
232
304
349
m/z-->

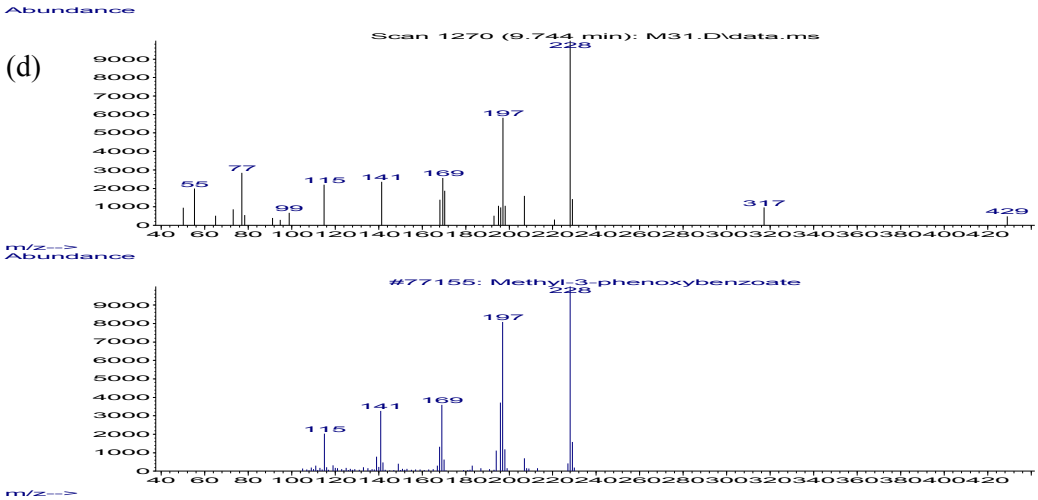
(b)


Abundance
Scan 2448 (15.919 min): MS1.D\data.ms
125
244
153
70
91
221
179
267
294
316
343
386
417
446
477
m/z-->
Abundance
#69896: 2,2,3,3-Tetramethylcyclopropanecarboxylic acid, phenyl ester
125
55
29
97
77
159
203
m/z-->

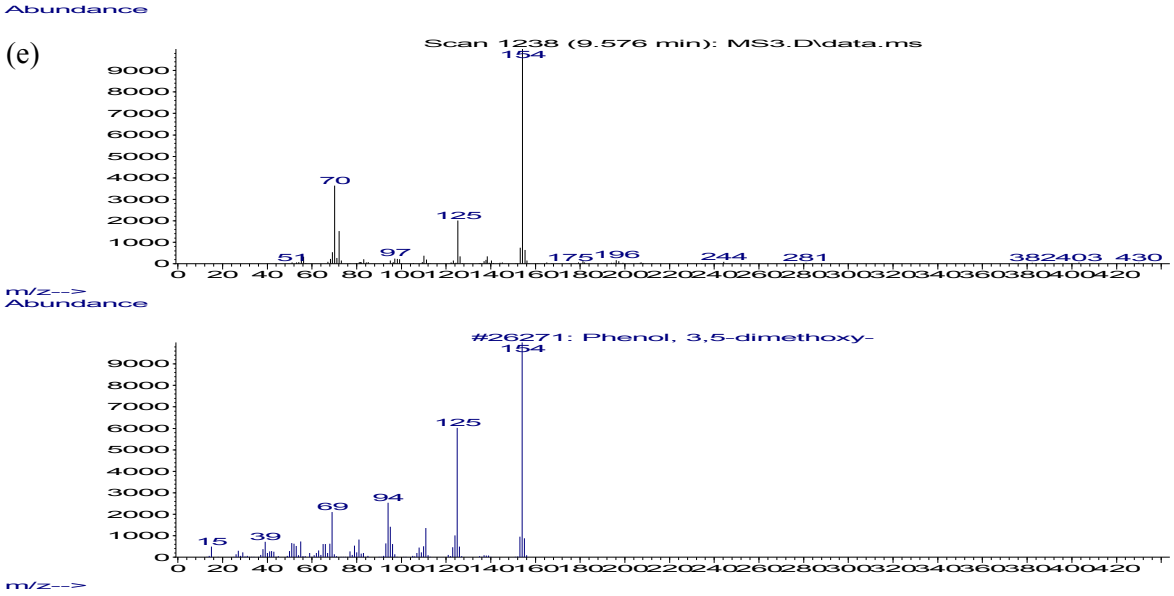
(c)


Abundance
Scan 1516 (11.034 min): MS3.D\data.ms
154
70
97
125
172
192
211
242
262
281
327
417
m/z-->
Abundance
#26234: Benzoic acid, 3,4-dihydroxy-
154
137
109
27
51
81
m/z-->

(d)


Abundance
Scan 1270 (9.744 min): M31.D\data.ms
228
197
77
55
115
141
169
99
317
429
m/z-->
Abundance
#77155: Methyl-3-phenoxybenzoate
228
197
141
169
115
m/z-->

(e)


Abundance
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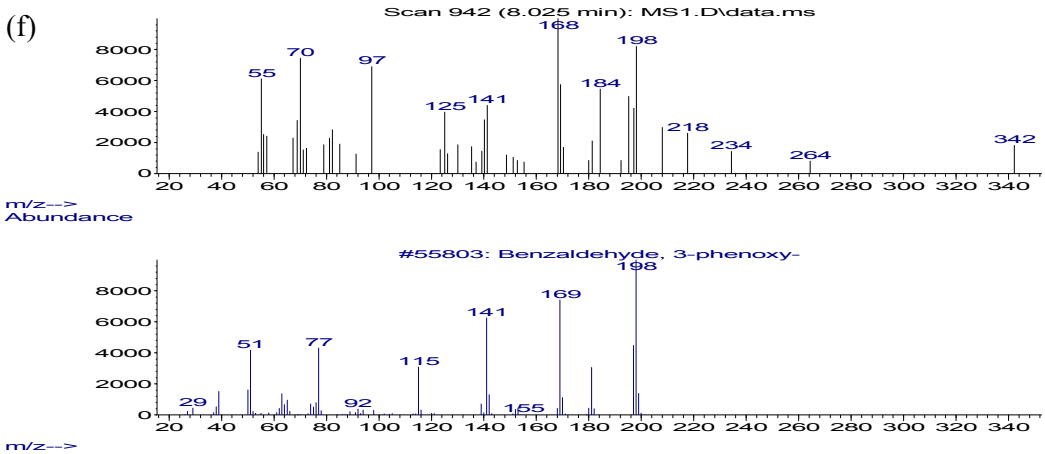
154
70
125
51
97
175
196
244
281
382
403
430
m/z-->
Abundance
#26271: Phenol, 3,5-dimethoxy-
154
125
69
94
15
39
m/z-->

(f)


Abundance
Scan 942 (8.025 min): MS1.D\data.ms
168
198
70
97
55
184
125
141
218
234
264
342
m/z-->
Abundance
#55803: Benzaldehyde, 3-phenoxy-
198
169
141
51
77
115
29
92
155
m/z-->

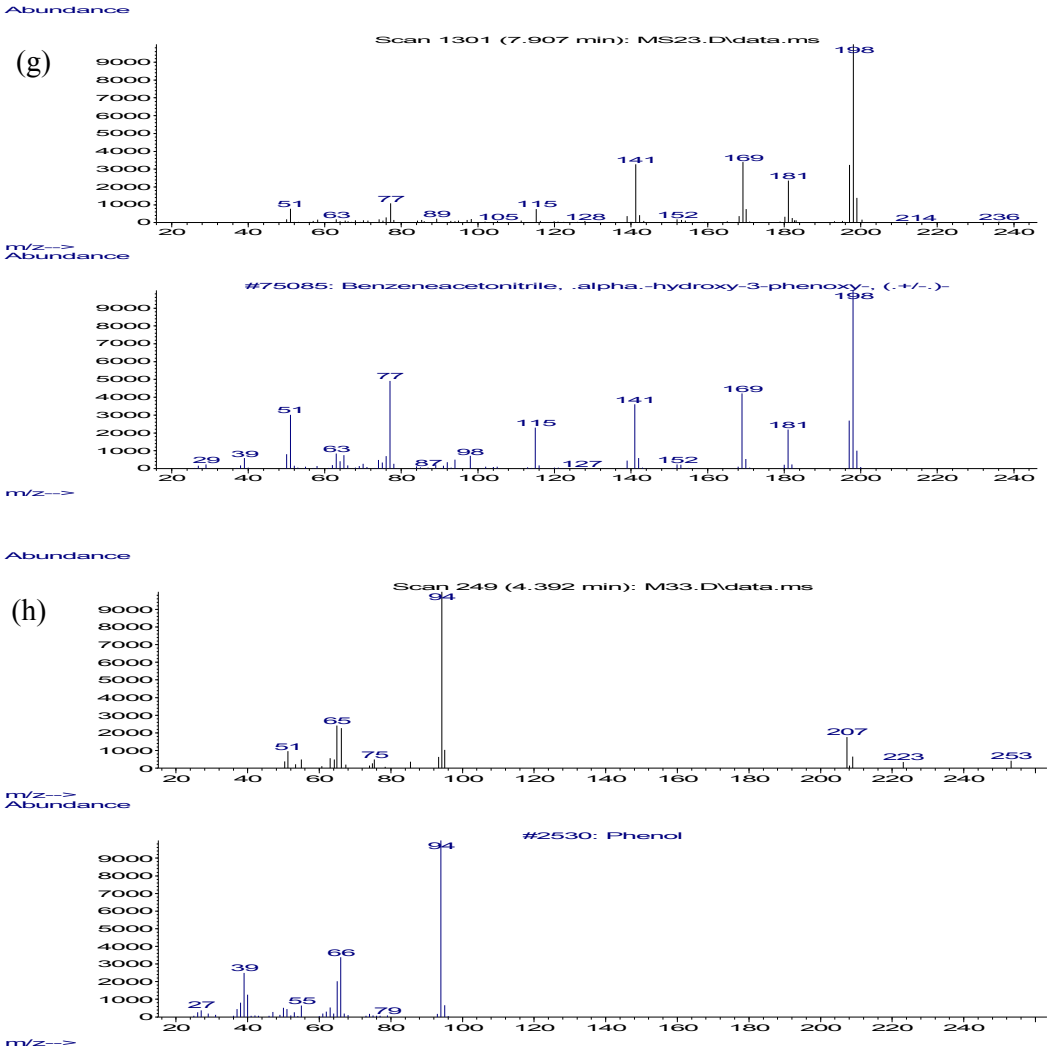


Figure S3. The mass spectra of fenpropathrin metabolites reported in the National Institute of Standards and Technology (NIST, USA) library database. (a) fenpropathrin; (b) 2,2,3,3-tetramethyl cyclopropanecarboxylic acid phenyl ester; (c) 3,4-dihydroxy benzoic acid; (d) 3-phenoxybenzoate; (e) 3,4-dimethoxy phenol; (f) 3-phenoxybenzaldehyde; (g) α-hydroxy-3-phenoxy-benzeneacetonitrile; (h) phenol

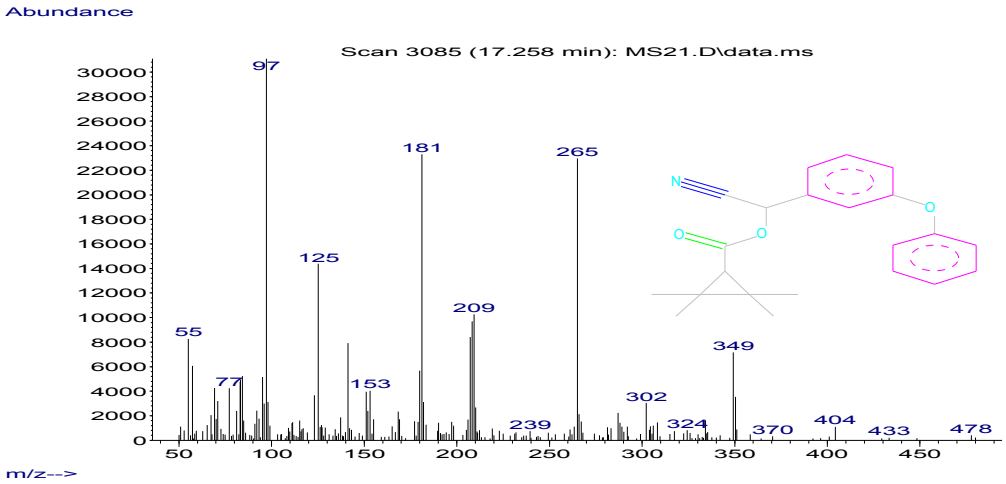


Figure S4. GC-MS analysis of the fenpropathrin metabolites in the non-inoculated control containing the same amount of fenpropathrin. The retention time of the metabolite was 17.258, which was identified as fenpropathrin.