

Table S1. Effect of bacterial isolates against *Colletotrium acutatum* in vitro

S. No.	Isolate	Radial growth of <i>C. acutatum</i> (cm)*	Percentage of inhibition over control*
1	PG 1	5.1	32 ^q (34.45)
2	PG 2	2.6	65 ^b (53.73)
3	PG 3	5.5	26.6 ^s (31.04)
4	PG 4	4.4	41 ^l (39.81)
5	PG 5	2.7	62 ^d (51.94)
6	PG 6	4.4	41 ^l (39.81)
7	PG 7	2.7	62 ^d (51.94)
8	PG 8	4.8	36 ^e (36.87)
9	PG 9	2.8	62.11 ^d (52.00)
10	PG 10	5.8	22.66 ^t (28.42)
11	PG 11	4.7	46 ^k (42.70)
12	PG 12	1.7	77.33 ^a (61.57)
13	PG 15	3.5	53.33 ^e (46.91)
14	JM 1	2.7	64 ^c (53.13)
15	JM 2	3.3	59 ^e (50.18)
16	JM 3	3.6	52 ^h (46.14)
17	JM 4	2.8	62 ^d (51.94)
18	JM 5	3.1	58.67 ^e (49.99)
19	JM 6	5.2	32.67 ^q (34.86)
20	JM 7	5.8	22.67 ^t (28.43)
21	JM8	3.9	48 ^j (43.85)
22	AB 1	4.5	39.2 ^m (38.76)
23	AB 2	4.1	45.33 ^k (42.32)
24	AB 3	3.5	53.33 ^g (46.91)
25	AB 4	3.7	50.26 ⁱ

			(45.15)
26	AB 5	3.1	58.66 ^e (49.98)
27	AB 6	3.3	55.2 ^f (47.98)
28	FS 1	3.9	46 ^k (42.70)
29	FS 2	4.4	41 ^l (39.81)
30	FS 3	3.7	48 ^j (43.85)
31	FS 4	4.7	37 ^o (37.46)
32	FS 5	4.6	38 ⁿ (38.05)
33	FS 6	5.4	27.95 ^r (31.91)
34	FS 7	5.7	24 ^r (29.33)
35	FS 8	4.8	36 ^p (36.87)
36	Pf1	3.5	51.6 ^h (46.00)
37	Control	7.5	100 ^u (0.27)

*Mean of three replications. Means in a column followed by the same superscript letters are not significantly different according to DMRT. Values in parentheses are arcsine transformed values.

Table S2. Growth-promoting activity of bacteria on chilli seedlings *in vitro*

S. No.	Isolate	Seedling length (cm)	Germination (%)	Vigour index*
1	PG 1	11.23	86	1367.4 ⁱ (36.97)
2	PG 2	28.34	88	2493.92 ^a (49.94)
3	PG 3	14.23	93	1323.39 ⁱ (36.37)
4	PG 4	16.78	88	1476.64 ^h (38.42)
5	PG 5	15.45	92	1421.4 ^h (37.69)
6	PG 6	18.86	96	1810.56 ^e (42.55)
7	PG 7	20.84	94	1958.96 ^d (44.25)
8	PG 8	12.45	90	1120.5 ^k (33.47)
9	PG 9	11.96	95	1136.2 ^k (33.71)
10	PG 10	15.89	88	1398.32 ⁱ (37.38)

11	PG 11	16.29	91	1482.39 ^h (38.49)
12	PG 12	21.25	95	2018.75 ^c (44.92)
13	PG 15	15.34	88	1349.92 ⁱ (36.74)
14	JM 1	20.04	94	1883.76 ^e (43.39)
15	JM 2	19.98	92	1748 ^f (41.80)
16	JM 3	14.67	86	1261.62 ^j (35.52)
17	JM 4	17.89	92	1637.6 ^h (40.46)
18	JM 5	21.78	84	1764 ^g (41.99)
19	JM 6	14.83	86	1275.38 ⁱ (35.70)
20	JM 7	22.76	96	2112 ^b (45.95)
21	JM8	17.59	84	1477.56 ^h (38.43)
22	AB 1	21.34	82	1749.88 ^e (41.82)
23	AB 2	18.12	93	1685.16 ^f (41.05)
24	AB 3	14.98	84	1258.32 ⁱ (35.46)
25	AB 4	20.58	91	1872.78 ^d (43.26)
26	AB 5	18.75	88	1650 ^f (40.61)
27	AB 6	16.86	96	1618.56 ^f (40.23)
28	FS 1	16.89	84	1418.76 ^h (37.65)
29	FS 2	19.67	88	1730.96 ^e (41.60)
30	FS 3	15.67	93	1457.31 ^h (38.17)
31	FS 4	19.67	88	1730.96 ^e (41.59)
32	FS 5	17.44	94	1639.36 ^f (40.48)
33	FS 6	15.89	90	1430.1 ^h (37.81)
34	FS 7	20.45	95	1942.75 ^d (44.08)
35	FS 8	16.67	91	1516.97 ^g (40.14)

36	Pf1	17.52	91	1594.32 ^g (33.66)
37	Control	12.86	78	1003.08 ^l (36.98)

* Mean of replication. In a column, means followed by common letters are not significantly different at the 5 % level by DMRT. Values in parentheses are arcsine transformed values

Table S3. Identification of Antimicrobial compounds from *Bacillus* spp. strain PG 2 through GC/MS

S.No	Retention time	Compound Name	Molecular weight	Molecular formula	Peak area (%)
1	1.753	Hydroxylamine	33.03	H ₃ NO or NH ₂ OH	75.81
2	1.753	Difluoromethane	52.024	CH ₂ F ₂	75.81
3	1.904	Dimethylamine	45.085	C ₂ H ₇ N	1.57
4	2.175	Topotecan	457.911	C ₂₃ H ₂₄ ClN ₃ O ₅	0.31
5	9.648	Amphetamine	135.21	C ₉ H ₁₃ N	0.51
6	10.818	Benzeneacetic acid	136.15	C ₈ H ₈ O ₂	1.27
7	13.678	Cyclohexylethylamine	127.23	C ₆ H ₁₁ CH	0.30
8	16.262	Imidazole-5-carboxylic acid	126.11	C ₅ H ₆ N ₂ O ₂	0.29
9	17.404	Uramil-N,N-diacetic acid	259.174	C ₈ H ₉ N ₃ O ₇	4.14
10	17.404	Propanenitrile	55.08	C ₃ H ₅ N	4.14
11	19.386	1-Methyldecylamine	171.329	C ₁₁ H ₂₅ N	0.28
12	19.386	2-Butalamine	73.139	C ₄ H ₁₁ N	0.29
13	19.734	Acetamide	87.831	(CH ₃)NH ₂	5.36
14	19.939	1-Guanidinosuccinimide	141.13	C ₅ H ₇ N ₃ O ₂	1.44
15	19.734	Piperazine	86.136	C ₄ H ₁₀ N ₂	5.36
16	19.939	Cyclobutanol	72.11	C ₄ H ₇ OH	1.44
17	23.378	2-Pentanamine	87.166	C ₅ H ₁₃ N	0.98
18	22.046	2-Heptanamine	115.22	C ₇ H ₁₇ N	0.37

Table S4. Effect of *Bacillus* spp. strain PG 2 against Anthracnose disease

S. No	Treatments	Anthracnose disease *		Fruit yield (Kg/ha)
		Disease incidence (%)	Percent reduction over control	
T ₁	Seed Treatment (ST) of <i>Bacillus subtilis</i> (PG 12) @10g/kg and Seedling dip (SD) @ 0.5 % for 30 minutes.	30.8	32.98 ^f (33.70)	3213.56 ^f
T ₂	ST of <i>Bacillus subtilis</i> (PG 2) @10g/kg and SD @ 0.5 % for 30 minutes	32.00	30.37 ^h (34.44)	3219.14 ^g
T ₃	ST of <i>Bacillus subtilis</i> (PG 12) @ 10g/kg + SD @0.5 % +Foliar spray(FS) @ 0.2 % of <i>Bacillus</i> (PG 12) at bimonthly interval	28.86	37.20 ^d (32.49)	3453.82 ^d
T ₄	ST of <i>Bacillus subtilis</i> (PG 2) @ 10g/kg + SD @0.5 % +Foliar spray(FS) @ 0.2 % of <i>Bacillus</i> (PG 2)	29.38	36.07 ^e (32.82)	3345.89 ^e
T ₅	ST of <i>Bacillus subtilis</i> (PG 2) @ 10g/kg +SA @ 2.5 kg/ha + SD @0.5 % +FS @ 0.2 % of <i>Bacillus</i> (PG 2) at bimonthly interval	27.57	40.01 ^c (31.67)	3504.54 ^c
T ₆	ST of <i>Bacillus subtilis</i> (PG 12) @ 10g/kg + SD @0.5 % + Soil Application(SA) @ 2.5 kg/ha + Foliar spray(FS) @ 0.2 % of <i>Bacillus</i> (PG 12) at bimonthly interval	19.34	57.91 ^a (26.08)	3673.58 ^a
T ₇	Foliar spray @ 10 % botanical (<i>Azadirachta indica</i>)	31.56	31.33 ^g (34.17)	3123.43 ^h
T ₈	Standard check as ST of <i>Pseudomonas fluorescens</i> (Pf 1) @ 10g/kg + SD @0.5 % +FS @ 0.2 % +SA @ 2.5 kg/ha of (Pf 1)	23.41	49.06 ^b (28.93)	3546.98 ^b
T ₉	Inoculated control (pathogen)	45.96	-	2545.95 ⁱ

* Mean of replication. In a column, means followed by common letters are not significantly different at the 5 % level by DMRT. Values in parentheses are arcsine transformed values.