Isolation, Identification, and Antibacterial Properties of Prodigiosin, a Bioactive Product Produced by a New *Serratia marcescens* JSSCPM1 Strain: Exploring the Biosynthetic Gene Clusters of *Serratia* Species for Biological Applications

Rajaguru Arivuselvam [1,2], Ayed A Dera [3], Syed Parween Ali [3], Yasser Alraey [3], Ahmed Saif [4], Umme Hani [5], Sivaa Arumugam Ramakrishnan [1,2], Mohamed Sheik Tharik Abdul Azeeze [6], Raman Rajeshkumar [1,*], Aishwarya S [7], Haritha H [7] and B.R. Prashantha Kumar [7,*]

[1] Department of Pharmaceutical Biotechnology, JSS College of Pharmacy, JSS Academy of Higher Education & Research, Ooty 643001, TN, India; arajaguru@jssuni.edu.in (R.A.); siarvinayaga@gmail.com (S.A.R.)
[2] Department of Pharmaceutical Biotechnology, JSS College of Pharmacy, JSS Academy of Higher Education & Research, Sri Shivarathreeshwara Nagar, Mysore 570015, KA, India
[3] Department of Clinical Laboratory Sciences, Central Research Laboratory, College of Applied Medical Sciences, King Khalid University, Abha 62529, Saudi Arabia; ayedd@kku.edu.sa (A.A.D.); sabali@kku.edu.sa (S.P.A.); yahamd@kku.edu.sa (Y.A.)
[4] Department of Clinical Laboratory Sciences, College of Applied Medical Sciences, King Khalid University, Abha 62529, Saudi Arabia; amsaif8080@gmail.com
[5] Department of Pharmaceutics, College of Pharmacy, King Khalid University, Guraiger, Abha 62529, Saudi Arabia; uahmed@kku.edu.sa
[6] Department of Pharmaceutical Analysis, College of Pharmacy, JSS Academy of Technical Education, Noida 201301, UP, India; mtharik@jssaten.ac.in
[7] Department of Pharmaceutical Chemistry, JSS College of Pharmacy, JSS Academy of Higher Education & Research, Sri Shivarathreeshwara Nagar, Mysore 570015, KA, India; aishwaryasusil31@gmail.com (A.S.); harithadd3@gmail.com (H.H.)
* Correspondence: 1ramanbiotech@gmail.com, bathmic@jssuni.edu.in (R.R.); brprashanthkumar@jssuni.edu.in (B.R.P.K.)

Supplementary files

Annexure – I

Biochemical test identification results of JSSCPM1 strain.

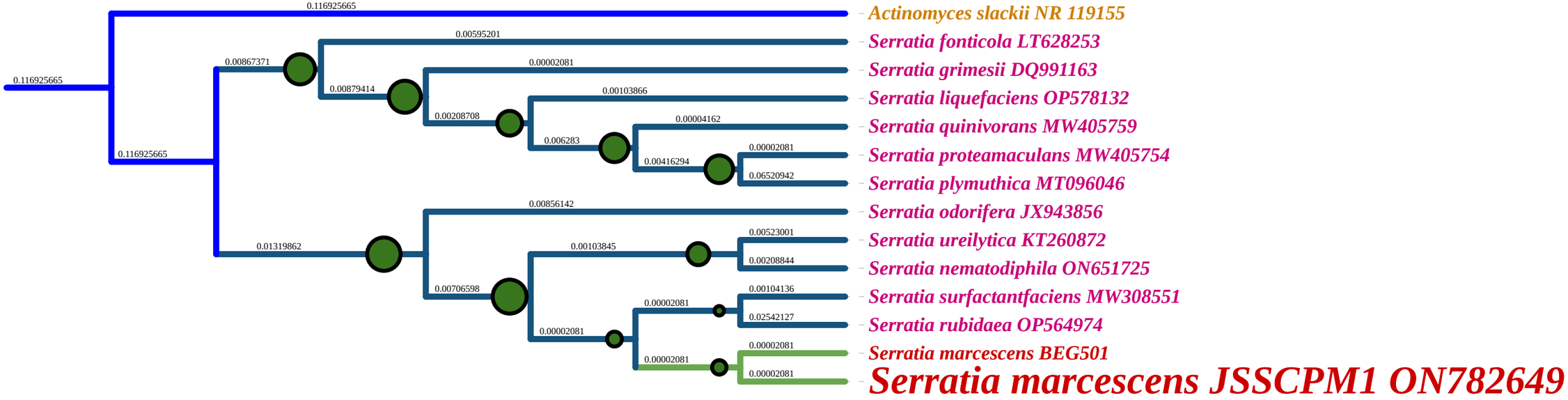
Biochemical test identification results of JSSCPM1 strain

Test	**JSSCPM1 strain**	***S. marcescens***
Indole production test	+	+
Nitrate reduction test	+	+
Catalase	+	+
Methyl red test	-	-
Glucose fermentation gas production test	+	+
Voges-Proskauert test	+	+
Urease	+	+
Oxidase	-	-
Acid production test (L-arabinose, D-xylose and cotton sugar fermentation)	-	-

Note: Positive (+), (-) negative

Annexure – II

Phylogenetic tree of *S. marcescens* JSSCPM1 strain and its twelve closest neighbours.


0.116925665
0.116925665
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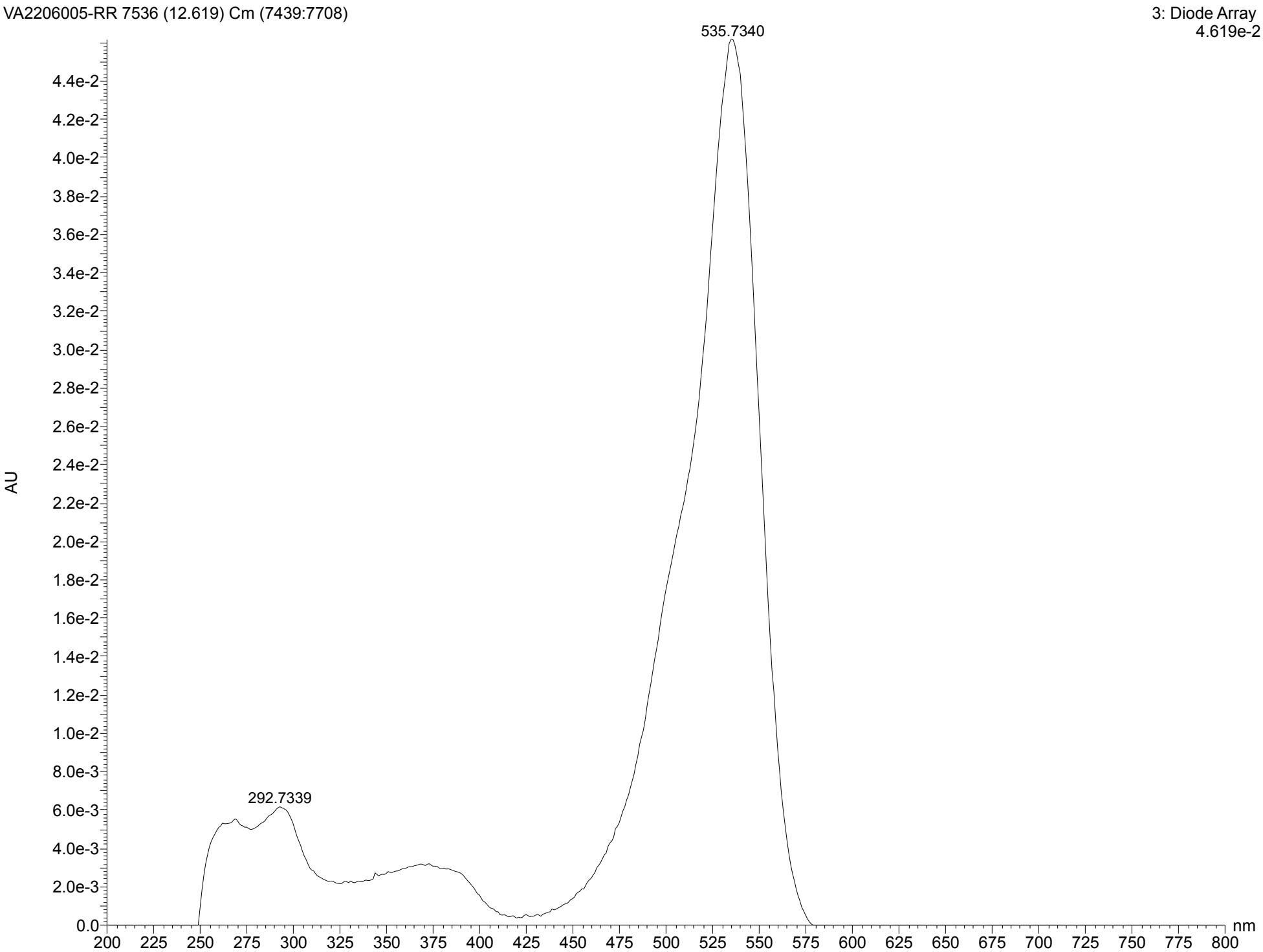
0.00867371
0.00595201
0.00879414
0.00002081
0.00208708
0.00103866
0.006283
0.00004162
0.00416294
0.00002081
0.06520942
0.01319862
0.00856142
0.00706598
0.00103845
0.00523001
0.00208844
0.00002081
0.00104136
0.02542127
0.00002081
0.00002081
0.00002081
0.00002081
Actinomyces slackii NR 119155
Serratia fonticola LT628253
Serratia grimesii DQ991163
Serratia liquefaciens OP578132
Serratia quinivorans MW405759
Serratia proteamaculans MW405754
Serratia plymuthica MT096046
Serratia odorifera JX943856
Serratia ureilytica KT260872
Serratia nematodiphila ON651725
Serratia surfactantfaciens MW308551
Serratia rubidaea OP564974
Serratia marcescens BEG501
Serratia marcescens JSSCPM1 ON782649

Annexure – III

UV absorption spectrum of PG compound


VA2206005-RR 7536 (12.619) Cm (7439:7708)
3: Diode Array
4.619e-2
535.7340
292.7339
AU
nm
4.4e-2
4.2e-2
4.0e-2
3.8e-2
3.6e-2
3.4e-2
3.2e-2
3.0e-2
2.8e-2
2.6e-2
2.4e-2
2.2e-2
2.0e-2
1.8e-2
1.6e-2
1.4e-2
1.2e-2
1.0e-2
8.0e-3
6.0e-3
4.0e-3
2.0e-3
0.0
200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800

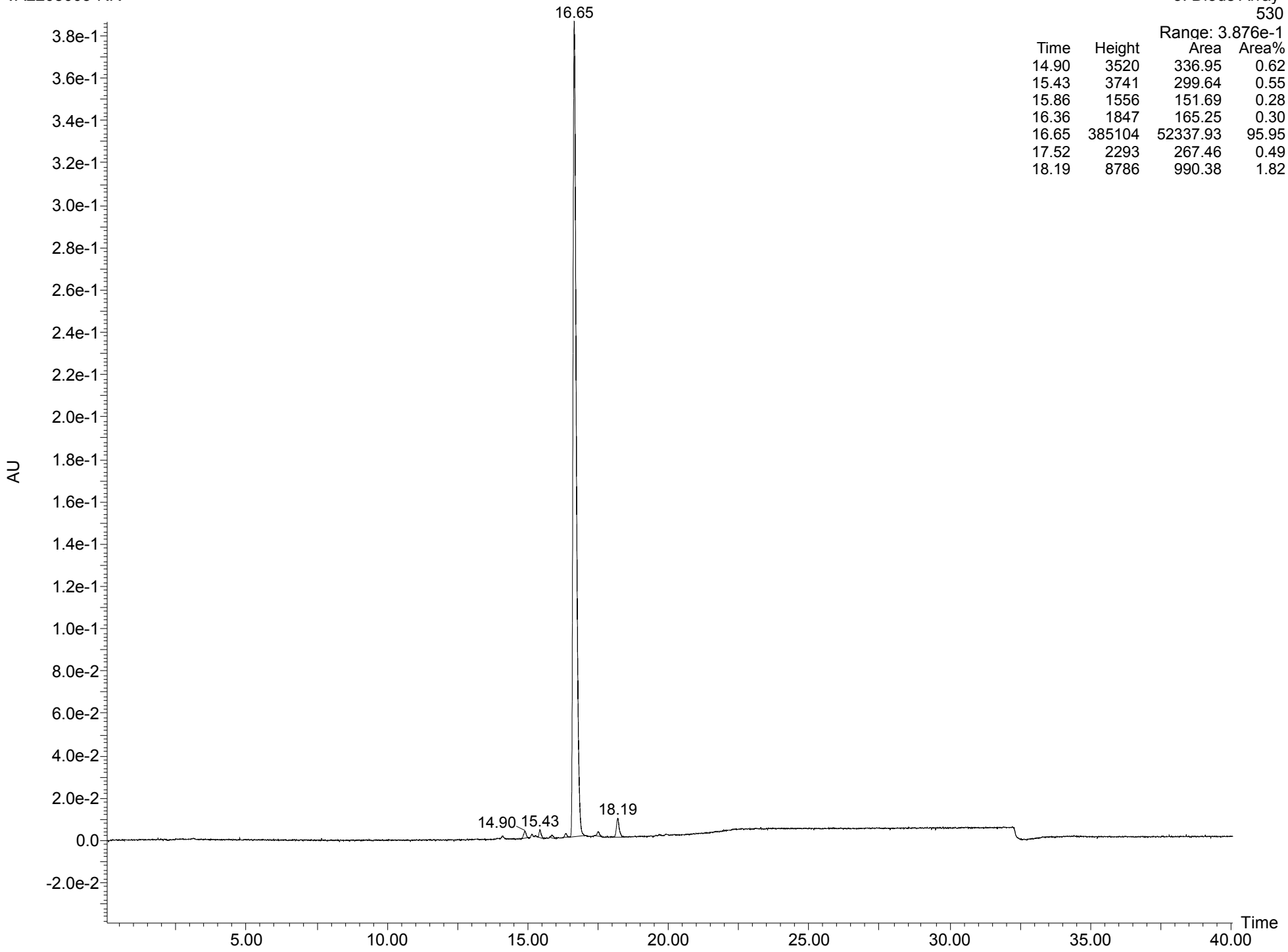
Annexure – IV

HPLC report of PG compound

VA2208003-RR

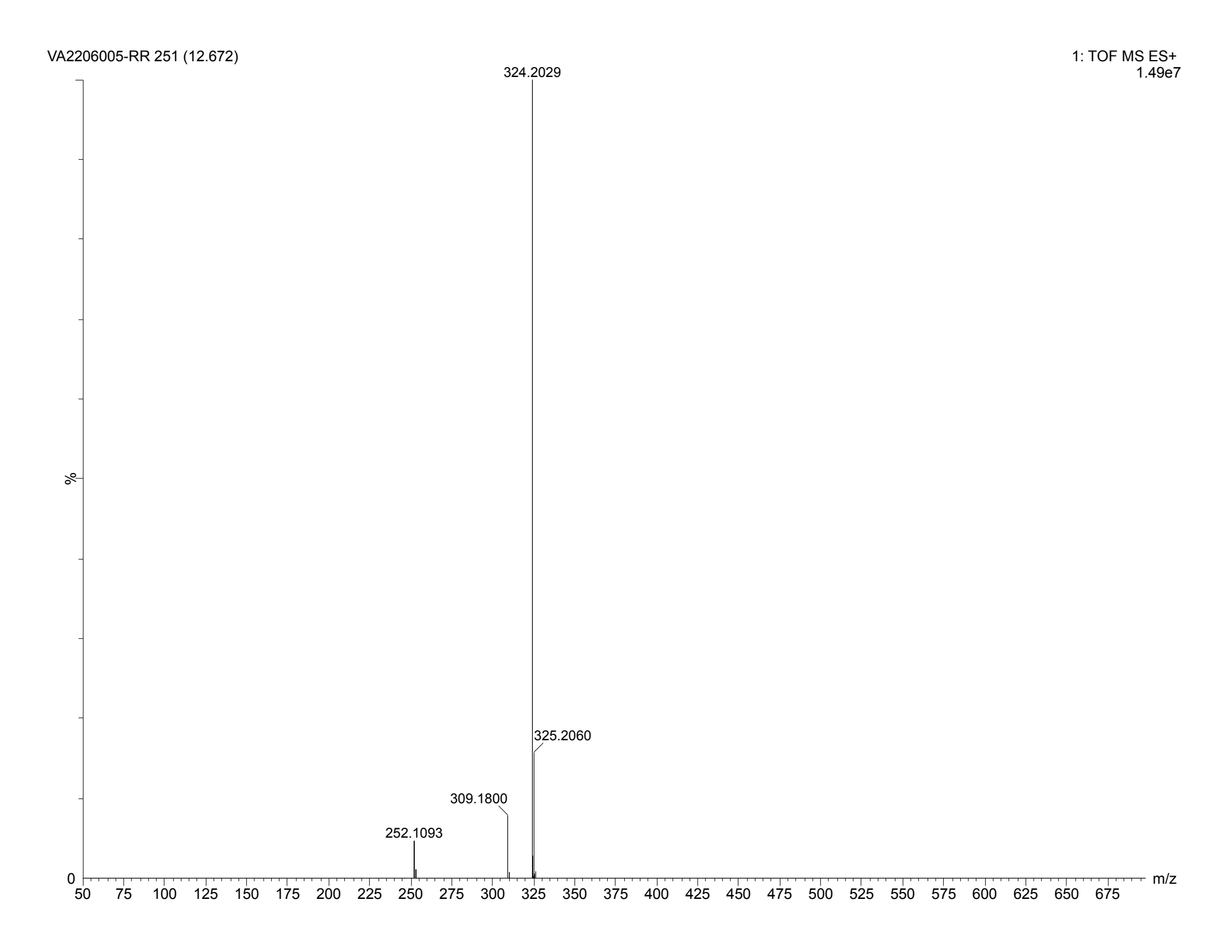
3: Diode Array
530
Range: 3.876e-1

Time	Height	Area	Area%
14.90	3520	336.95	0.62
15.43	3741	299.64	0.55
15.86	1556	151.69	0.28
16.36	1847	165.25	0.30
16.65	385104	52337.93	95.95
17.52	2293	267.46	0.49
18.19	8786	990.38	1.82



Annexure – V

LC-MS analysis of PG Compound

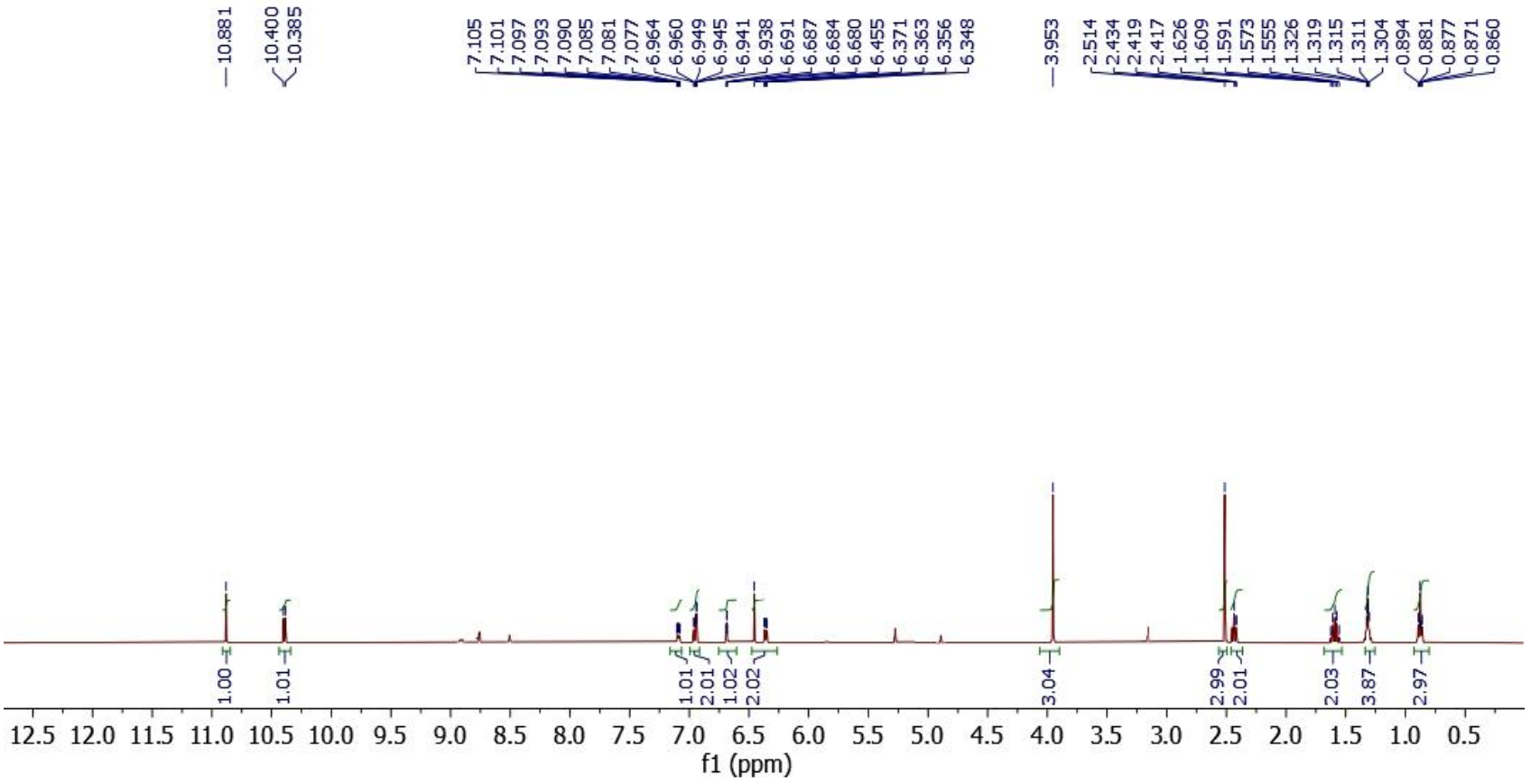

VA2206005-RR 251 (12.672)
1: TOF MS ES+
1.49e7
324.2029
325.2060
309.1800
252.1093
%
0
m/z
50
75
100
125
150
175
200
225
250
275
300
325
350
375
400
425
450
475
500
525
550
575
600
625
650
675

Annexure –VI

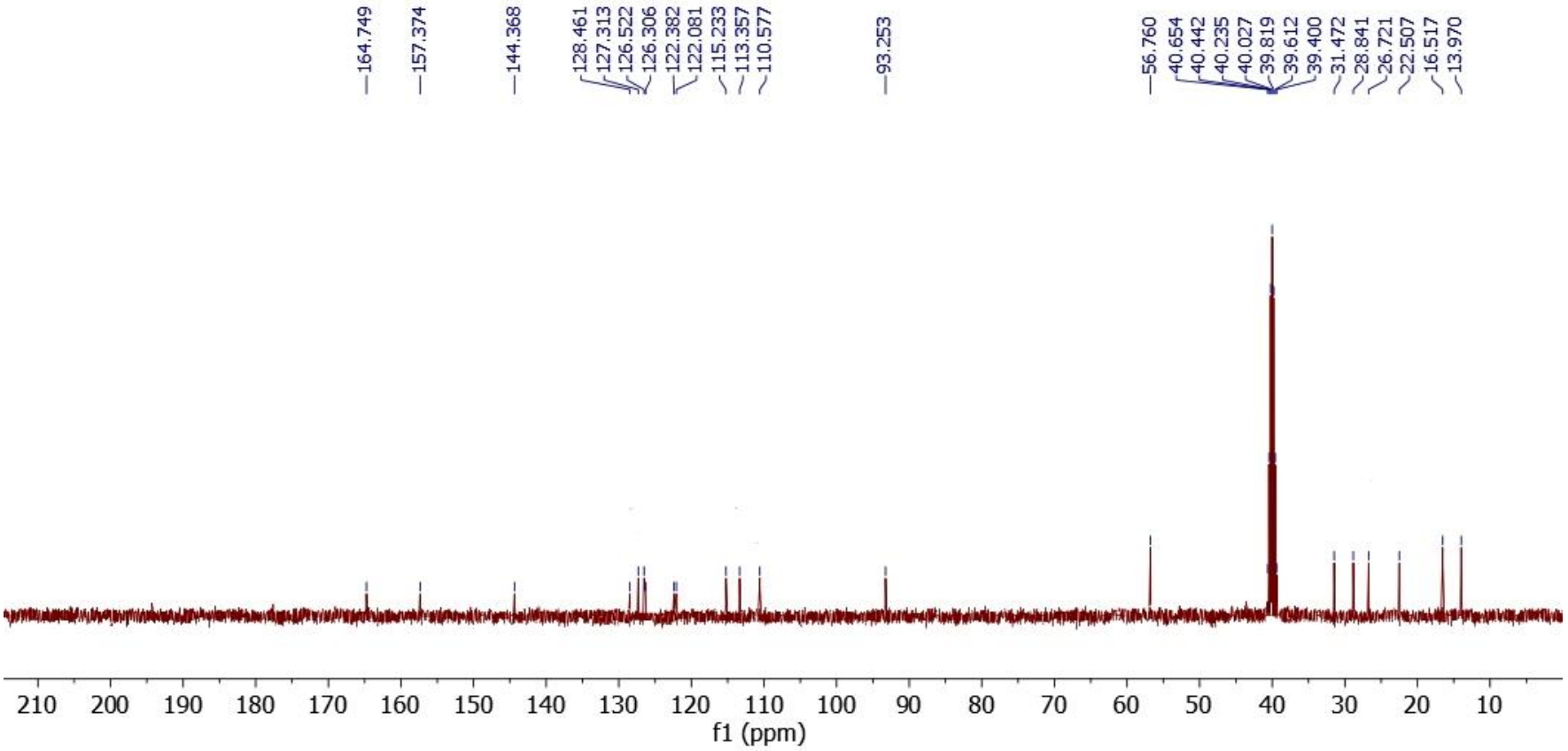
^{1}H and ^{13}C NMR report of PG compound

Sample RR NRM Report:

Bruker 400MHz NMR



1H NMR Spectrum of Sample RR



13C NMR Spectrum of Sample RR

Annexure – VII

Total 122 chromosomal genomes of *S. marcescens*, *Serratia sp.*, and *Serratia nematodiphila* used in this study, along with their name, GenBank accession number and unique database links.

Sl.NO	Species name	GenBank Accession number	Genome database link
1	*Serratia marcescens* strain M158-1-1 chromosome, complete genome	CP060440.1	https://www.ncbi.nlm.nih.gov/nuccore/CP060440.1
2	*Serratia marcescens* strain MGH246 chromosome	CP060487.1	https://www.ncbi.nlm.nih.gov/nuccore/CP060487.1
3	*Serratia marcescens* strain MV-u1-SK1-O chromosome, complete genome	CP085860.1	https://www.ncbi.nlm.nih.gov/nuccore/CP085860.1
4	*Serratia marcescens* strain N10A28 chromosome, complete genome	CP033623.1	https://www.ncbi.nlm.nih.gov/nuccore/CP033623.1
5	*Serratia marcescens* strain N4-5 chromosome, complete genome	CP031316.1	https://www.ncbi.nlm.nih.gov/nuccore/CP031316.1
6	*Serratia marcescens* strain RH10 chromosome, complete genome	CP092461.1	https://www.ncbi.nlm.nih.gov/nuccore/CP092461.1
7	*Serratia marcescens* strain RSC-14, complete genome	CP012639.1	https://www.ncbi.nlm.nih.gov/nuccore/CP012639.1
8	*Serratia marcescens* strain S2I7 genome	CP021984.1	https://www.ncbi.nlm.nih.gov/nuccore/CP021984.1
9	*Serratia marcescens* strain SARVS06 chromosome, complete genome	CP110102.1	https://www.ncbi.nlm.nih.gov/nuccore/CP110102.1
10	*Serratia marcescens* strain SASK1000 chromosome, complete genome	CP100753.1	https://www.ncbi.nlm.nih.gov/nuccore/CP100753.1
11	*Serratia marcescens* strain 12/2010 chromosome, complete genome	CP053925.1	https://www.ncbi.nlm.nih.gov/nuccore/CP053925.1
12	*Serratia marcescens* strain 1274 chromosome, partial genome	CP019927.2	https://www.ncbi.nlm.nih.gov/nuccore/CP019927.2
13	*Serratia marcescens* strain 1602 chromosome, complete genome	CP047391.1	https://www.ncbi.nlm.nih.gov/nuccore/CP047391.1
14	*Serratia marcescens* strain 1912768R chromosome, complete genome	CP040350.1	https://www.ncbi.nlm.nih.gov/nuccore/CP040350.1
15	*Serratia marcescens* strain 2838 chromosome, complete genome	CP047685.1	https://www.ncbi.nlm.nih.gov/nuccore/CP047685.1
16	*Serratia marcescens* strain 3024 chromosome, complete genome	CP047682.1	https://www.ncbi.nlm.nih.gov/nuccore/CP047682.1
17	*Serratia marcescens* strain 332 chromosome, complete genome	CP021164.1	https://www.ncbi.nlm.nih.gov/nuccore/CP021164.1
18	*Serratia marcescens* strain 4201 chromosome, complete genome	CP047679.1	https://www.ncbi.nlm.nih.gov/nuccore/CP047679.1
19	*Serratia marcescens* strain 95 chromosome, complete genome	CP020503.1	https://www.ncbi.nlm.nih.gov/nuccore/CP020503.1
20	*Serratia marcescens* strain UMH3 chromosome, complete genome	CP018925.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018925.1
21	*Serratia marcescens* strain UMH5 chromosome, complete genome	CP018917.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018917.1
22	*Serratia marcescens* strain UMH6 chromosome, complete genome	CP018926.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018926.1
23	*Serratia marcescens* strain UMH7 chromosome, complete genome	CP018919.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018919.1
24	*Serratia marcescens* strain UMH8 chromosome, complete genome	CP018927.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018927.1
25	*Serratia marcescens* strain UMH9 chromosome, complete genome	CP018923.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018923.1
26	*Serratia marcescens* strain SJC1048 genome assembly, chromosome: 1	OX291586.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291586.1
27	*Serratia marcescens* strain SJC1050 genome assembly, chromosome: 1	OX291796.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291796.1
28	*Serratia marcescens* strain SJC1051 genome assembly, chromosome: 1	OX291746.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291746.1
29	*Serratia marcescens* strain SJC1052 genome assembly, chromosome: 1	OX291705.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291705.1
30	*Serratia marcescens* strain SJC1054 genome assembly, chromosome: 1	OX291528.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291705.1
31	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S97_jyu2015 chromosome, complete genome	CP071202.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071202.1

32	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S9_jyu2015 chromosome, complete genome	CP071238.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071238.1/
33	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_SA_jyu2015 chromosome, complete genome	CP071214.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071214.1/
34	*Serratia marcescens subsp. marcescens* Db11, complete genome	HG326223.1	https://www.ncbi.nlm.nih.gov/nuccore/HG326223.1/
35	*Serratia marcescens* WW4, complete genome	CP003959.1	https://www.ncbi.nlm.nih.gov/nuccore/CP003959.1/
36	*Serratia nematodiphila* strain DH-S01 chromosome, complete genome	CP038662.1	https://www.ncbi.nlm.nih.gov/nuccore/CP038662.1
37	*Serratia sp.* FDAARGOS_506 chromosome, complete genome	CP033831.1	https://www.ncbi.nlm.nih.gov/nuccore/CP033831.1
38	*Serratia sp.* FS14, complete genome	CP005927.1	https://www.ncbi.nlm.nih.gov/nuccore/CP005927.1
39	*Serratia sp.* HRI chromosome, complete genome	CP083690.1	https://www.ncbi.nlm.nih.gov/nuccore/CP083690.1
40	*Serratia sp.* JKS000199 genome assembly, chromosome: I	LT907843.1	https://www.ncbi.nlm.nih.gov/nuccore/LT907843.1
41	*Serratia sp.* LS-1 chromosome, complete genome	CP033504.1	https://www.ncbi.nlm.nih.gov/nuccore/CP033504.1
42	*Serratia sp.* SSNIH1 chromosome, complete genome	CP026383.1	https://www.ncbi.nlm.nih.gov/nuccore/CP026383.1
43	*Serratia marcescens* strain UMH1 chromosome, complete genome	CP018915.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018915.1
44	*Serratia marcescens* strain UMH10 chromosome, complete genome	CP018928.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018928.1
45	*Serratia marcescens* strain UMH11 chromosome, complete genome	CP018929.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018929.1
46	*Serratia marcescens* strain UMH12 chromosome, complete genome	CP018930.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018930.1
47	*Serratia marcescens* strain UMH2 chromosome, complete genome	CP018924.1	https://www.ncbi.nlm.nih.gov/nuccore/CP018924.1
48	*Serratia marcescens* strain FDAARGOS_65 chromosome, complete genome	CP026050.1	https://www.ncbi.nlm.nih.gov/nuccore/CP026050.1
49	*Serratia marcescens* strain FDAARGOS_659 chromosome	CP050960.1	https://www.ncbi.nlm.nih.gov/nuccore/CP050960.1
50	*Serratia marcescens* strain FY chromosome, complete genome	CP053378.1	https://www.ncbi.nlm.nih.gov/nuccore/CP053378.1
51	*Serratia marcescens* strain FZSF02 chromosome, complete genome	CP053286.1	https://www.ncbi.nlm.nih.gov/nuccore/CP053286.1
52	*Serratia marcescens* strain ICU-2 chromosome	CP059038.1	https://www.ncbi.nlm.nih.gov/nuccore/CP059038.1
53	*Serratia marcescens* strain ICU-3 chromosome	CP059037.1	https://www.ncbi.nlm.nih.gov/nuccore/CP059037.1
54	*Serratia marcescens* strain ICU-4 chromosome	CP059036.1	https://www.ncbi.nlm.nih.gov/nuccore/CP059036.1
55	*Serratia marcescens* strain JW-CZ2 chromosome, complete genome	CP055161.1	https://www.ncbi.nlm.nih.gov/nuccore/CP055161.1
56	*Serratia marcescens* strain KS10 chromosome	CP027798.1	https://www.ncbi.nlm.nih.gov/nuccore/CP027798.1
57	*Serratia marcescens* strain LVF3 chromosome, complete genome	CP063229.1	https://www.ncbi.nlm.nih.gov/nuccore/CP063229.1
58	*Serratia marcescens* strain WVU-002 chromosome, complete genome	CP041123.1	https://www.ncbi.nlm.nih.gov/nuccore/CP041123.1
59	*Serratia marcescens* strain WVU-004 chromosome, complete genome	CP041125.1	https://www.ncbi.nlm.nih.gov/nuccore/CP041125.1
60	*Serratia marcescens* strain WVU-007 chromosome, complete genome	CP041130.1	https://www.ncbi.nlm.nih.gov/nuccore/CP041130.1
61	*Serratia marcescens* strain WVU-008 chromosome, complete genome	CP041131.1	https://www.ncbi.nlm.nih.gov/nuccore/CP041131.1
62	*Serratia marcescens* strain WVU-009 chromosome, complete genome	CP041132.1	https://www.ncbi.nlm.nih.gov/nuccore/CP041132.1
63	*Serratia marcescens* strain WVU-010 chromosome, complete genome	CP041134.1	https://www.ncbi.nlm.nih.gov/nuccore/CP041134.1

64	*Serratia marcescens* strain YHYF1 chromosome, complete genome	CP092184.1	https://www.ncbi.nlm.nih.gov/nuccore/CP092184.1
65	*Serratia marcescens subsp. marcescens* ATCC 13880 chromosome, complete genome	CP072199.1	https://www.ncbi.nlm.nih.gov/nuccore/CP072199.1
66	*Serratia marcescens subsp. marcescens* ATCC 13880 chromosome, complete genome	CP041233.1	https://www.ncbi.nlm.nih.gov/nuccore/CP041233.1
67	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S13_jyu2015 chromosome, complete genome	CP071236.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071236.1
68	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S22_jyu2015 chromosome, complete genome	CP071226.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071226.1
69	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S24_jyu2015 chromosome, complete genome	CP071216.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071216.1
70	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S28_jyu2015 chromosome, complete genome	CP071222.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071222.1
71	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S33_jyu2015 chromosome, complete genome	CP071224.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071224.1
72	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S37_jyu2015 chromosome, complete genome	CP071244.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071244.1
73	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S57_jyu2015 chromosome, complete genome	CP071220.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071220.1
74	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S60_jyu2015 chromosome, complete genome	CP071192.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071192.1
75	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S64_jyu2015 chromosome, complete genome	CP071240.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071240.1
76	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S65_jyu2015 chromosome, complete genome	CP071218.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071218.1
77	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S67_jyu2015 chromosome, complete genome	CP071232.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071232.1
78	*Serratia marcescens* strain BP2 chromosome, complete genome	CP050013.1	https://www.ncbi.nlm.nih.gov/nuccore/CP050013.1
79	*Serratia marcescens* strain BWH-23 chromosome, complete genome	CP020501.1	https://www.ncbi.nlm.nih.gov/nuccore/CP020501.1
80	*Serratia marcescens* strain BWH-35 chromosome, complete genome	CP020507.1	https://www.ncbi.nlm.nih.gov/nuccore/CP020507.1
81	*Serratia marcescens* strain Byron chromosome, complete genome	CP054277.1	https://www.ncbi.nlm.nih.gov/nuccore/CP054277.1
82	*Serratia marcescens* strain C110 chromosome, complete genome	CP047691.1	https://www.ncbi.nlm.nih.gov/nuccore/CP047691.1
83	*Serratia marcescens* strain CM2012_028 chromosome, complete genome	CP091122.1	https://www.ncbi.nlm.nih.gov/nuccore/CP091122.1
84	*Serratia marcescens* strain E28 chromosome, complete genome	CP042512.1	https://www.ncbi.nlm.nih.gov/nuccore/CP042512.1
85	*Serratia marcescens* strain EL1 chromosome	CP027796.1	https://www.ncbi.nlm.nih.gov/nuccore/CP027796.1
86	*Serratia marcescens* strain ESE2014 chromosome, complete genome	CP058353.1	https://www.ncbi.nlm.nih.gov/nuccore/CP058353.1
87	*Serratia marcescens* strain SJC1058 genome assembly, chromosome: 1	OX291724.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291724.1
88	*Serratia marcescens* strain SJC1061 genome assembly, chromosome: 1	OX291610.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291610.1

89	*Serratia marcescens* strain SJC1062 genome assembly, chromosome: 1	OX291474.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291474.1
90	*Serratia marcescens* strain SJC1070 genome assembly, chromosome: 1	OX291687.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291687.1
91	*Serratia marcescens* strain SJC1039 genome assembly, chromosome: 1	OX291654.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291654.1
92	*Serratia marcescens* strain SJC1043 genome assembly, chromosome: 1	OX291536.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291536.1
93	*Serratia marcescens* strain SJC1044 genome assembly, chromosome: 1	OX291771.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291771.1
94	*Serratia marcescens* strain SJC1045 genome assembly, chromosome: 1	OX291470.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291470.1
95	*Serratia marcescens* strain SJC1046 genome assembly, chromosome: 1	OX291532.1	https://www.ncbi.nlm.nih.gov/nuccore/OX291532.1
96	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S68_jyu2015 chromosome, complete genome	CP071198.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071198.1
97	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S6_jyu2015 chromosome, complete genome	CP071204.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071204.1
98	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S71_jyu2015 chromosome, complete genome	CP071206.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071206.1
99	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S78_jyu2015 chromosome, complete genome	CP071228.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071228.1
100	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S79_jyu2015 chromosome, complete genome	CP071190.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071190.1
101	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S81_jyu2015 chromosome, complete genome	CP071208.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071208.1
102	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S89_jyu2015 chromosome, complete genome	CP071210.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071210.1
103	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S94_jyu2015 chromosome, complete genome	CP071188.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071188.1
104	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S95_jyu2015 chromosome, complete genome	CP071234.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071234.1
105	*Serratia marcescens subsp. marcescens* ATCC 13880 substr. Sm_S96_jyu2015 chromosome, complete genome	CP071200.1	https://www.ncbi.nlm.nih.gov/nuccore/CP071200.1
106	*Serratia marcescens* strain SCH909 chromosome, complete genome	CP063238.1	https://www.ncbi.nlm.nih.gov/nuccore/CP063238.1
107	*Serratia marcescens* strain SCQ1 chromosome, complete genome	CP063354.1	https://www.ncbi.nlm.nih.gov/nuccore/CP063354.1
108	*Serratia marcescens* strain SGAir0764 chromosome, complete genome	CP027300.1	https://www.ncbi.nlm.nih.gov/nuccore/CP027300.1
109	*Serratia marcescens* strain SMBC50 chromosome, complete genome	CP109829.1	https://www.ncbi.nlm.nih.gov/nuccore/CP109829.1
110	*Serratia marcescens* strain SMNSF-1 chromosome, complete genome	CP090244.1	https://www.ncbi.nlm.nih.gov/nuccore/CP090244.1
111	*Serratia marcescens* strain SmUNAM836 chromosome, complete sequence	CP012685.1	https://www.ncbi.nlm.nih.gov/nuccore/CP012685.1
112	*Serratia marcescens* strain Sys06 chromosome, complete genome	CP090908.1	https://www.ncbi.nlm.nih.gov/nuccore/CP090908.1
113	*Serratia marcescens* strain U36365 chromosome, complete genome	CP016032.1	https://www.ncbi.nlm.nih.gov/nuccore/CP016032.1
114	*Serratia marcescens* 2020-O-9 DNA, complete genome	AP024847.1	https://www.ncbi.nlm.nih.gov/nuccore/AP024847.1

115	*Serratia marcescens* AS-1 DNA, complete genome	AP019009.1	https://www.ncbi.nlm.nih.gov/nuccore/AP019009.1
116	*Serratia marcescens* ATCC 274 DNA, complete genome	AP021873.1	https://www.ncbi.nlm.nih.gov/nuccore/AP021873.1
117	*Serratia marcescens* isolate GN26 chromosome	CP026650.1	https://www.ncbi.nlm.nih.gov/nuccore/CP026650.1
118	*Serratia marcescens* isolate PWN146_assembly genome assembly, chromosome: Chromosome	LT575490.1	https://www.ncbi.nlm.nih.gov/nuccore/LT575490.1
119	*Serratia marcescens* SM39 DNA, complete genome	AP013063.1	https://www.ncbi.nlm.nih.gov/nuccore/AP013063.1
120	*Serratia marcescens* SMB2099 complete genome	HG738868.1	https://www.ncbi.nlm.nih.gov/nuccore/HG738868.1
121	*Serratia marcescens* strain 11/2010 chromosome, complete genome	CP053927.1	https://www.ncbi.nlm.nih.gov/nuccore/CP053927.1
122	*Serratia marcescens* strain 1140- chromosome, complete genome	CP047688.1	https://www.ncbi.nlm.nih.gov/nuccore/CP047688.1

Annexure – VIII

Comprehensive comparative analysis of PG producing BGCs in 122 *Serratia* species belonging to three different categories

Type	Location		Bioactive compound	Most Known cluster	similarity
	From	To			
Serratia marcescens strain M158-1-1 chromosome, complete genome					
NRPS	1,768,922	1,815,529	pyrronazol B	NRP + Polyketide	9%
RRE-containing	1,849,816	1,870,094	lankacidin C	NRP + Polyketide	13%
NRPS	1,946,631	1,994,234	microcin H47	RiPP:Microcin	20%
thiopeptide	2,571,915	2,598,359	O-antigen	Saccharide	14%
betalactone	3,600,139	3,625,807	-	-	-
hserlactone	3,802,810	3,823,454	-	-	-
NRPS	3,959,473	4,043,669	vulnibactin	NRP	18%
NRPS	4,812,080	4,856,018	R1128	Polyketide	14%
Serratia marcescens strain MGH246 chromosome					
thiopeptide	255,818	282,261	O-antigen	Saccharide	14%
RRE-containing	992,988	1,013,266	lankacidin C	NRP + Polyketide	13%
NRPS	1,033,752	1,081,677	pyrronazol B	NRP + Polyketide	9%
NRPS	1,719,642	1,805,531	-	-	-
siderophore	2,998,995	3,010,854	-	-	-
NRPS	3,198,021	3,271,448	xenotetrapeptide	NRP	100%
NRPS	4,045,919	4,105,114	vulnibactin	NRP	18%
NRPS-like,hserlactone	4,238,536	4,289,518	-	-	-
betalactone	4,483,768	4,509,437	-	-	-
NRPS,T1PKS	4,912,950	4,969,288	olimycin A / olimycin B	Polyketide	5%
Serratia marcescens strain MV-u1-SK1-O chromosome, complete genome					
NRPS	301,925	360,320	vulnibactin	NRP	18%
NRPS-like,hserlactone	484,411	536,204	-	-	-
betalactone	744,225	769,893	-	-	-
thiopeptide	1,723,598	1,750,041	O-antigen	Saccharide	14%
NRPS	2,318,574	2,365,587	microcin H47	RiPP:Microcin	20%
RRE-containing	2,452,198	2,472,476	lankacidin C	NRP + Polyketide	13%
NRPS	2,488,797	2,534,905	pyrronazol B	NRP + Polyketide	9%

T1PKS,NRPS	3,147,495	3,209,493	althiomycin	NRP	100%
NRPS	4,612,536	4,670,316	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain N10A28 chromosome, complete genome					
betalactone	61,318	86,987	-	-	-
NRPS,T1PKS	540,336	595,959	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,159,811	1,186,254	O-antigen	Saccharide	14%
RRE-containing	1,897,121	1,917,399	lankacidin C	NRP + Polyketide	13%
NRPS	1,939,073	1,986,863	pyrronazol B	NRP + Polyketide	9%
NRPS	2,613,416	2,699,302	-	-	-
siderophore	3,879,359	3,891,218	-	-	-
NRPS	4,078,386	4,135,283	xenotetrapeptide	NRP	100%
NRPS	4,906,759	4,966,587	turnerbactin	NRP	30%
NRPS-like	5,094,203	5,137,166	-	-	-
Serratia marcescens strain N4-5 chromosome, complete genome					
NRPS-like,hserlactone	464,549	515,758	-	-	-
betalactone	718,310	743,980	-	-	-
prodigiosin	**1,096,070**	**1,131,090**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,709,166	1,735,610	O-antigen	Saccharide	14%
NRPS	2,327,560	2,372,840	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,461,838	2,484,000	lankacidin C	NRP + Polyketide	13%
NRPS	2,511,923	2,559,392	pyrronazol B	NRP + Polyketide	9%
NRPS	4,524,652	4,568,587	xantholipin	Polyketide	4%
Serratia marcescens strain RH10 chromosome, complete genome					
NRPS	315,410	357,890	enterobactin	NRP	12%
NRPS-like	480,852	523,292	-	-	-
betalactone	739,899	765,566	-	-	-
thiopeptide	1,706,630	1,733,074	O-antigen	Saccharide	14%
NRPS	2,368,316	2,415,325	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,493,929	2,516,091	lankacidin C	NRP + Polyketide	13%

NRPS	2,545,383	2,593,893	pyrronazol B	NRP + Polyketide	9%
Serratia marcescens strain RSC-14, complete genome					
thiopeptide	321,461	347,209	-	-	-
NRPS	937,262	982,472	-	-	-
betalactone	1,352,119	1,377,787	-	-	-
NRPS	1,744,602	1,803,283	vulnibactin	NRP	12%
hserlactone	2,035,550	2,056,224	-	-	-
NRPS	2,578,081	2,634,840	rhizomide A / rhizomide B / rhizomide C	NRP	100%
thiopeptide,LAP	3,389,285	3,418,062	-	-	-
NRPS	3,926,126	4,011,902	-	-	-
NRPS	4,632,414	4,680,924	pyrronazol B	NRP + Polyketide	9%
RRE-containing	4,712,243	4,732,521	lankacidin C	NRP + Polyketide	13%
Serratia marcescens strain S2I7 genome					
NRPS	329,927	384,346	vulnibactin	NRP	18%
betalactone	807,967	833,637	-	-	-
redox-cofactor	1,030,071	1,051,482	lankacidin C	NRP + Polyketide	13%
prodigiosin	**1,204,774**	**1,239,794**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,842,979	1,869,424	O-antigen	Saccharide	14%
redox-cofactor	2,595,048	2,617,210	lankacidin C	NRP + Polyketide	13%
NRPS	2,635,571	2,682,118	pyrronazol B	NRP + Polyketide	9%
NRPS	3,359,430	3,403,192	-	-	-
NRPS	4,730,647	4,774,585	xantholipin	Polyketide	4%
Serratia marcescens strain SARVS06 chromosome, complete genome					
NRPS	74,291	115,597	bicornutin A1 / bicornutin A2	NRP	100%
NRPS	1,457,516	1,501,271	-	-	-
NRPS	2,147,453	2,193,972	pyrronazol B	NRP + Polyketide	9%
RRE-containing	2,216,040	2,233,241	lankacidin C	NRP + Polyketide	13%
thiopeptide	2,987,192	3,013,636	O-antigen	Saccharide	14%
prodigiosin	**3,605,836**	**3,640,856**	**prodigiosin**	**Polyketide**	**100%**

redox-cofactor	3,793,423	3,815,585	lankacidin C	NRP + Polyketide	13%
betalactone	3,986,125	4,011,795	-	-	-
NRPS	4,417,714	4,460,809	vulnibactin	NRP	12%
Serratia marcescens strain SASK1000 chromosome, complete genome					
NRPS	74,291	115,598	bicornutin A1 / bicornutin A2	NRP	100%
NRPS	1,457,519	1,501,273	-	-	-
NRPS	2,147,454	2,193,971	pyrronazol B	NRP + Polyketide	9%
redox-cofactor	2,213,833	2,234,891	lankacidin C	NRP + Polyketide	13%
thiopeptide	2,987,190	3,013,634	O-antigen	Saccharide	14%
prodigiosin	**3,605,830**	**3,640,850**	**prodigiosin**	**Polyketide**	**100%**
redox-cofactor	3,793,416	3,815,578	lankacidin C	NRP + Polyketide	13%
betalactone	3,986,116	4,011,786	-	-	-
NRPS	4,400,963	4,460,804	vulnibactin	NRP	18%
Serratia marcescens strain 12/2010 chromosome, complete genome					
NRPS	287,085	345,646	vulnibactin	NRP	18%
NRPS-like,hserlactone	459,515	510,629	-	-	-
betalactone	717,332	743,001	-	-	-
NRPS	**1,110,632**	**1,155,304**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,747,804	1,774,245	O-antigen	Saccharide	14%
NRPS	2,119,200	2,172,276	-	-	-
RRE-containing	2,585,999	2,606,277	lankacidin C	NRP + Polyketide	13%
NRPS	2,621,159	2,667,417	-	-	-
NRPS	3,485,251	3,534,269	-	-	-
NRPS	5,063,102	5,119,952	xenotetrapeptide	NRP	100%
NRPS,T1PKS	5,355,540	5,410,162	-	-	-
Serratia marcescens strain 1274 chromosome, partial genome					
thiopeptide	736,176	762,618	O-antigen	Saccharide	14%
betalactone	1,828,191	1,853,858	-	-	-
hserlactone	2,042,741	2,063,433	-	-	-

NRPS	2,218,300	2,260,684	turnerbactin	NRP	30%
NRPS,NRPS-like	3,998,394	4,052,053	lysobactin	NRP	2%
siderophore	4,239,977	4,251,836	-	-	-
NRPS	4,310,601	4,396,437	-	-	-
NRPS	5,026,004	5,074,514	pyrronazol B	NRP + Polyketide	9%
RRE-containing	5,095,122	5,115,400	lankacidin C	NRP + Polyketide	13%
Serratia marcescens strain 1602 chromosome, complete genome					
NRPS	270,830	329,366	vulnibactin	NRP	18%
NRPS-like,hserlactone	444,964	497,080	-	-	-
betalactone	700,290	725,960	-	-	-
NRPS	**1,089,090**	**1,133,764**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,733,034	1,759,475	O-antigen	Saccharide	14%
NRPS	2,363,456	2,409,846	colicin V	RiPP	1%
RRE-containing	2,497,536	2,517,814	lankacidin C	NRP + Polyketide	13%
NRPS	2,539,518	2,586,327	-	-	-
NRPS	3,222,740	3,271,248	-	-	-
NRPS	4,539,011	4,594,551	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS,T1PKS	4,829,806	4,884,428	-	-	-
Serratia marcescens strain 1912768R chromosome, complete genome					
NRPS	1,219,713	1,263,481	-	-	-
NRPS	1,955,399	2,001,998	turnerbactin	NRP	15%
redox-cofactor	2,019,297	2,040,267	lankacidin C	NRP + Polyketide	13%
thiopeptide	2,707,712	2,734,156	O-antigen	Saccharide	14%
prodigiosin	**3,328,113**	**3,363,133**	**prodigiosin**	**Polyketide**	**100%**
redox-cofactor	3,515,714	3,537,876	lankacidin C	NRP + Polyketide	13%
betalactone	3,708,560	3,734,230	-	-	-
NRPS	4,140,914	4,199,727	vulnibactin	NRP	18%
NRPS	4,997,021	5,040,959	xantholipin	Polyketide	4%
Serratia marcescens strain 2838 chromosome, complete genome					

NRPS	292,397	350,100	vulnibactin	NRP	18%
NRPS-like	474,518	516,297	-	-	-
betalactone	772,671	798,340	-	-	-
NRPS	**1,191,319**	**1,235,993**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,833,431	1,859,872	O-antigen	Saccharide	14%
NRPS	2,547,860	2,594,559	colicin V	RiPP	1%
RRE-containing	2,679,230	2,699,508	lankacidin C	NRP + Polyketide	13%
NRPS	2,719,697	2,764,840	pyrronazol B	NRP + Polyketide	9%
NRPS	3,407,003	3,456,553	lipopolysaccharide	Saccharide:Lipopolysaccharide	5%
NRPS	3,519,745	3,576,602	gobichelin A / gobichelin B	NRP	11%
RiPP-like	3,918,291	3,930,837	-	-	-
NRPS	4,830,442	4,888,294	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain 3024 chromosome, complete genome					
NRPS	789,965	846,809	rhizomide A / rhizomide B / rhizomide C	NRP	100%
RiPP-like	1,746,396	1,758,942	-	-	-
NRPS	2,100,631	2,157,488	gobichelin A / gobichelin B	NRP	11%
NRPS	2,220,680	2,270,230	lipopolysaccharide	Saccharide:Lipopolysaccharide	5%
NRPS	2,913,492	2,958,635	pyrronazol B	NRP + Polyketide	9%
RRE-containing	2,978,824	2,999,102	lankacidin C	NRP + Polyketide	13%
NRPS	3,083,773	3,130,472	colicin V	RiPP	1%
thiopeptide	3,818,626	3,845,067	O-antigen	Saccharide	14%
NRPS	**4,442,505**	**4,487,179**	**prodigiosin**	**Polyketide**	**12%**
betalactone	4,880,157	4,905,826	-	-	-
NRPS-like	5,162,200	5,203,979	-	-	-
NRPS	5,326,799	5,386,622	vulnibactin	NRP	18%
Serratia marcescens strain 332 chromosome, complete genome					
NRPS	281,130	339,279	vulnibactin	NRP	18%
betalactone	698,703	724,372	-	-	-
thiopeptide	1,685,588	1,712,031	O-antigen	Saccharide	14%

RRE-containing	2,356,430	2,376,708	lankacidin C	NRP + Polyketide	13%
NRPS	2,410,990	2,457,623	pyrronazol B	NRP + Polyketide	9%
RiPP-like	3,647,550	3,660,078	-	-	-
NRPS	4,521,966	4,565,904	R1128	Polyketide	14%
Serratia marcescens strain 4201 chromosome, complete genome					
hserlactone	23,319	43,993	-	-	-
NRPS	277,466	336,713	vulnibactin	NRP	12%
betalactone	711,467	737,135	-	-	-
NRPS-like,NRPS	**1,126,560**	**1,171,227**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,819,149	1,844,869	O-antigen	Saccharide	14%
RRE-containing	2,539,939	2,560,217	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	2,572,441	2,642,698	pyrronazol B	NRP + Polyketide	9%
NRPS	3,284,769	3,370,545	-	-	-
thiopeptide,LAP,NRPS	3,870,841	3,918,187	microcin E492	RiPP:Microcin	12%
NRPS	4,774,975	4,832,821	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain 95 chromosome, complete genome					
NRPS	267,640	326,049	turnerbactin	NRP	30%
NRPS-like	440,629	482,641	-	-	-
betalactone	686,207	711,877	-	-	-
thiopeptide	1,823,248	1,849,690	O-antigen	Saccharide	14%
siderophore	1,999,540	2,011,399	-	-	-
redox-cofactor	2,570,922	2,593,084	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	3,264,723	3,327,660	althiomycin	NRP	100%
NRPS	3,455,571	3,500,770	-	-	-
NRPS	4,730,531	4,788,383	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain UMH3 chromosome, complete genome					
betalactone	60,940	86,609	-	-	-
NRPS	**428,720**	**473,393**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,077,451	1,103,892	O-antigen	Saccharide	14%

NRPS	1,735,352	1,782,064	colicin V	RiPP	1%
RRE-containing	1,865,618	1,885,896	lankacidin C	NRP + Polyketide	13%
NRPS	1,935,243	1,981,754	turnerbactin	NRP	15%
NRPS	2,686,444	2,734,951	-	-	-
NRPS	4,078,128	4,134,978	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS,T1PKS	4,357,877	4,412,036	-	-	-
NRPS	4,918,550	4,978,379	vulnibactin	NRP	18%
NRPS-like,hserlactone	5,092,894	5,144,974			
Serratia marcescens strain UMH5 chromosome, complete genome					
betalactone	60,796	86,465	-	-	-
thiopeptide	1,153,113	1,179,556	O-antigen	Saccharide	14%
RRE-containing	1,883,518	1,903,796	lankacidin C	NRP + Polyketide	13%
NRPS	1,924,541	1,972,355	pyrronazol B	NRP + Polyketide	9%
NRPS	2,598,877	2,684,754	-	-	-
siderophore	3,841,687	3,853,546	-	-	-
NRPS	4,913,885	4,973,712	vulnibactin	NRP	18%
hserlactone	5,213,524	5,234,168	-	-	-
Serratia marcescens strain UMH6 chromosome, complete genome					
betalactone	61,010	86,679			
NRPS,T1PKS	448,346	548,890	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,098,383	1,124,825	O-antigen	Saccharide	14%
RRE-containing	1,868,800	1,889,078	lankacidin C	NRP + Polyketide	13%
NRPS	1,889,898	1,937,878	turnerbactin	NRP	15%
NRPS	2,590,530	2,667,119	ravidomycin	Polyketide	5%
NRPS	3,995,027	4,049,933	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,234,941	4,277,402	pseudomonine	NRP	20%
hserlactone	4,502,685	4,523,359	-	-	-
NRPS	4,840,443	4,884,387	enterobactin	NRP	12%
Serratia marcescens strain UMH7 chromosome, complete genome					

betalactone	61,010	86,678			
NRPS	**457,943**	**503,165**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,126,065	1,151,789	O-antigen	Saccharide	14%
RRE-containing	1,846,706	1,866,984	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,877,903	1,947,780	pyrronazol B	NRP + Polyketide	9%
NRPS	2,560,316	2,636,614	-	-	-
thiopeptide,LAP,NRPS	3,146,832	3,192,346	microcin E492	RiPP:Microcin	12%
NRPS	3,987,938	4,044,684	rhizomide A / rhizomide B / rhizomide C	NRP	100%
hserlactone	4,566,104	4,586,778	-	-	-
NRPS	4,819,283	4,879,273	vulnibactin	NRP	12%
Serratia marcescens strain UMH8 chromosome, complete genome					
betalactone	61,029	86,698	-	-	-
prodigiosin	**443,511**	**478,531**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,057,373	1,083,817	O-antigen	Saccharide	14%
NRPS	1,665,800	1,712,675	microcin H47	RiPP:Microcin	20%
redox-cofactor	1,789,938	1,812,100	lankacidin C	NRP + Polyketide	13%
NRPS	1,837,358	1,883,756	pyrronazol B	NRP + Polyketide	9%
NRPS	3,910,884	3,954,107	xantholipin	Polyketide	4%
NRPS	4,762,634	4,822,454	vulnibactin	NRP	12%
NRPS-like	4,944,552	4,987,530	-	-	-
Serratia marcescens strain UMH9 chromosome, complete genome					
betalactone	60,933	86,602			
NRPS	**439,738**	**484,387**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,065,875	1,092,316	O-antigen	Saccharide	14%
NRPS	1,634,363	1,681,070	colicin V	RiPP	1%
RRE-containing	1,769,262	1,789,540	lankacidin C	NRP + Polyketide	13%
NRPS	1,807,920	1,854,010	pyrronazol B	NRP + Polyketide	9%
NRPS	2,478,653	2,527,576	-	-	-
NRPS	3,788,524	3,845,379	xenotetrapeptide	NRP	100%

NRPS,T1PKS	4,068,151	4,121,045	-	-	-
NRPS	4,642,493	4,702,316	vulnibactin	NRP	18%
Serratia marcescens strain SJC1048 genome assembly, chromosome: 1					
NRPS	291,794	351,526	vulnibactin	NRP	12%
NRPS-like	475,241	517,428	-	-	-
RRE-containing	524,603	539,264	-	-	-
betalactone	745,983	771,652	-	-	-
thiopeptide	1,842,573	1,869,016	O-antigen	Saccharide	14%
siderophore	2,054,663	2,066,522	-	-	-
redox-cofactor	2,592,864	2,615,026	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	3,248,078	3,311,145	althiomycin	NRP	100%
NRPS	3,376,840	3,421,933	-	-	-
NRPS	3,487,193	3,533,250	yersiniabactin	NRP + Polyketide	4%
NRPS	4,820,838	4,875,468	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain SJC1050 genome assembly, chromosome: 1					
T1PKS,NRPS	1	44,123	althiomycin	NRP	100%
NRPS	109,818	154,911	-	-	-
NRPS	220,171	266,228	yersiniabactin	NRP + Polyketide	4%
NRPS	1,553,851	1,608,189	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	2,457,726	2,517,717	vulnibactin	NRP	12%
NRPS-like	2,641,027	2,684,008	-	-	-
RRE-containing	2,690,757	2,705,418	-	-	-
betalactone	2,912,137	2,937,806	-	-	-
thiopeptide	4,008,405	4,034,848	O-antigen	Saccharide	14%
siderophore	4,220,495	4,232,354	-	-	-
redox-cofactor	4,758,697	4,780,859	lankacidin C	NRP + Polyketide	13%
Serratia marcescens strain SJC1051 genome assembly, chromosome: 1					
NRPS	291,793	351,524	vulnibactin	NRP	12%
NRPS-like	475,239	517,426	-	-	-

RRE-containing	524,601	539,262	-	-	-
betalactone	745,981	771,650	-	-	-
thiopeptide	995,870	1,022,313	O-antigen	Saccharide	14%
siderophore	2,054,373	2,066,232	-	-	-
redox-cofactor	2,638,910	2,661,072	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	3,294,136	3,357,203	althiomycin	NRP	100%
NRPS	3,422,898	3,467,991	-	-	-
NRPS	3,533,251	3,579,308	yersiniabactin	NRP + Polyketide	4%
NRPS	4,866,940	4,921,570	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain SJC1052 genome assembly, chromosome: 1					
thiopeptide	249,683	276,126	O-antigen	Saccharide	14%
siderophore	461,773	473,632	-	-	-
redox-cofactor	999,974	1,022,136	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,655,187	1,718,254	althiomycin	NRP	100%
NRPS	1,783,949	1,829,042	-	-	-
NRPS	1,894,302	1,940,359	yersiniabactin	NRP + Polyketide	4%
NRPS	3,229,636	3,282,371	cichopeptin	NRP	46%
NRPS	4,131,908	4,191,899	vulnibactin	NRP	12%
NRPS-like	4,315,209	4,358,190	-	-	-
RRE-containing	4,362,837	4,383,103	-	-	-
betalactone	4,586,311	4,611,980	-	-	-
Serratia marcescens strain SJC1054 genome assembly, chromosome: 1					
NRPS	291,794	351,526	vulnibactin	NRP	12%
NRPS-like	475,241	517,428	-	-	-
RRE-containing	524,603	539,264	-	-	-
betalactone	745,983	771,652	-	-	-
thiopeptide	1,842,414	1,868,857	O-antigen	Saccharide	14%
siderophore	2,054,504	2,066,363	-	-	-
redox-cofactor	2,592,705	2,614,867	lankacidin C	NRP + Polyketide	13%

T1PKS,NRPS	3,247,919	3,310,986	althiomycin	NRP	100%
NRPS	3,376,681	3,421,774	-	-	-
NRPS	3,487,034	3,533,091	yersiniabactin	NRP + Polyketide	4%
NRPS	4,822,071	4,875,261	orfamide A / orfamide C	NRP:Cyclic depsipeptide	17%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S97_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,991	1,794,435	O-antigen	Saccharide	14%
NRPS	2,368,848	2,415,859	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,765	2,512,927	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,776	2,589,195	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,071	4,621,009	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S9_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,948	1,794,392	O-antigen	Saccharide	14%
NRPS	2,368,805	2,415,816	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,722	2,512,884	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,733	2,589,152	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,027	4,620,965	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_SA_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,949	1,794,393	O-antigen	Saccharide	14%

NRPS	2,368,806	2,415,817	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,723	2,512,885	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,734	2,589,153	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,029	4,620,967	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens Db11, complete genome					
betalactone	60,868	86,536	-	-	-
thiopeptide	1,024,305	1,050,756	O-antigen	Saccharide	14%
NRPS	1,619,286	1,666,298	microcin H47	RiPP:Microcin	20%
RRE-containing	1,754,535	1,774,813	lankacidin C	NRP + Polyketide	13%
NRPS	1,796,558	1,843,060	pyrronazol B	NRP + Polyketide	9%
T1PKS,NRPS	2,395,828	2,457,825	althiomycin	NRP	100%
arylpolyene	3,839,497	3,883,093	aryl polyenes	Other	100%
NRPS	3,883,633	3,940,276	rhizomide A / rhizomide B / rhizomide C	NRP	100%
RiPP-like	4,500,368	4,512,896	-	-	-
NRPS	4,715,800	4,775,756	vulnibactin	NRP	18%
NRPS-like	4,933,385	4,976,369	-	-	-
Serratia marcescens WW4, complete genome					
NRPS	329,936	388,977	vulnibactin	NRP	18%
betalactone	807,967	833,637	-	-	-
redox-cofactor	1,030,071	1,051,482	lankacidin C	NRP + Polyketide	13%
prodigiosin	**1,204,774**	**1,239,794**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,842,979	1,869,424	O-antigen	Saccharide	14%
redox-cofactor	2,595,048	2,617,210	lankacidin C	NRP + Polyketide	13%
NRPS	2,635,571	2,682,136	pyrronazol B	NRP + Polyketide	9%
NRPS	3,359,430	3,403,192	-	-	-
NRPS	4,730,647	4,774,585	xantholipin	Polyketide	4%
Serratia nematodiphila strain DH-S01 chromosome, complete genome					
NRPS	270,826	329,600	vulnibactin	NRP	18%
betalactone	737,420	763,089	-	-	-

redox-cofactor	966,089	987,140	lankacidin C	NRP + Polyketide	13%
NRPS,prodigiosin	**1,138,450**	**1,199,322**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,785,395	1,811,839	O-antigen	Saccharide	14%
NRPS	2,418,527	2,464,724	microcin H47	RiPP:Microcin	13%
redox-cofactor	2,543,865	2,566,027	lankacidin C	NRP + Polyketide	13%
NRPS	2,574,938	2,622,872	-	-	-
NRPS	3,240,739	3,317,255	ravidomycin	Polyketide	5%
NRPS	4,706,161	4,750,096	xantholipin	Polyketide	4%
Serratia sp. FDAARGOS_506 chromosome, complete genome					
NRPS	981,778	1,024,295	R1128	Polyketide	14%
NRPS	1,788,075	1,847,910	turnerbactin	NRP	30%
betalactone	2,183,474	2,209,141	-	-	-
thiopeptide	3,154,703	3,181,145	O-antigen	Saccharide	14%
RRE-containing	3,804,251	3,824,529	lankacidin C	NRP + Polyketide	13%
Serratia sp. FS14, complete genome					
betalactone	118,946	144,616	-	-	-
NRPS	520,270	562,659	enterobactin	NRP	12%
NRPS	1,367,361	1,410,107	xantholipin	Polyketide	4%
NRPS-like,thiopeptide,LAP	2,282,421	2,329,041	microcin E492	RiPP:Microcin	12%
NRPS	2,838,063	2,914,575	ravidomycin	Polyketide	5%
NRPS	3,584,001	3,632,511	turnerbactin	NRP	15%
redox-cofactor	3,635,442	3,657,604	lankacidin C	NRP + Polyketide	13%
thiopeptide	4,341,885	4,368,329	O-antigen	Saccharide	14%
prodigiosin	**4,984,802**	**5,019,822**	**prodigiosin**	**Polyketide**	**100%**
Serratia sp. HRI chromosome, complete genome					
RRE-containing	51,492	71,770	lankacidin C	NRP + Polyketide	13%
siderophore	615,034	626,893	-	-	-
thiopeptide	778,811	805,253	O-antigen	Saccharide	14%
betalactone	1,898,614	1,924,284	-	-	-
NRPS-like	2,160,759	2,202,954	-	-	-

NRPS	2,319,451	2,378,422	vulnibactin	NRP	12%
NRPS	3,173,401	3,230,608	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,641,719	4,684,660	-	-	-
NRPS,T1PKS	4,772,658	4,835,570	althiomycin	NRP	100%
Serratia sp. JKS000199 genome assembly, chromosome: I					
NRPS	**407,871**	**452,538**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,057,678	1,083,422	O-antigen	Saccharide	14%
RRE-containing	1,722,738	1,743,016	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,754,014	1,823,956	pyrronazol B	NRP + Polyketide	9%
NRPS	2,444,730	2,530,512			
thiopeptide,LAP,NRPS	3,031,011	3,078,357	microcin E492	RiPP:Microcin	12%
NRPS	3,848,791	3,905,540	xenotetrape-ptide	NRP-	-100%
hserlactone	4,434,954	4,455,628	-	-	-
NRPS	4,687,820	4,747,807	vulnibactin	NRP	12%
Serratia sp. LS-1 chromosome, complete genome					
betalactone	60,998	86,666	-	-	-
NRPS	**458,441**	**503,640**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,131,760	1,157,501	O-antigen	Saccharide	14%
RRE-containing	1,826,788	1,847,066	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,856,123	1,926,240	pyrronazol B	NRP + Polyketide	9%
NRPS	2,545,248	2,621,858	ravidomycin	Polyketide	5%
thiopeptide,LAP,NRPS	3,124,460	3,171,810	microcin E492	RiPP:Microcin	12%
NRPS	3,919,990	3,976,734	rhizomide A / rhizomide B / rhizomide C	NRP	100%
hserlactone	4,513,748	4,534,422	-	-	-
NRPS	4,767,060	4,827,050	vulnibactin	NRP	12%
Serratia sp. SSNIH1 chromosome, complete genome					
NRPS	775,160	834,356	vulnibactin	NRP	12%
NRPS-like	912,465	992,709	-	-	-
betalactone	1,197,509	1,223,182	-	-	-

thiopeptide	2,273,286	2,299,728	O-antigen	Saccharide	14%
siderophore	2,449,698	2,461,557	-	-	-
redox-cofactor	2,970,905	2,993,067	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	3,696,584	3,757,175	althiomycin	NRP	87%
NRPS	3,808,016	3,853,115	-	-	-
NRPS	5,189,111	5,246,963	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain UMH1 chromosome, complete genome					
betalactone	60,784	86,452	-	-	-
thiopeptide	1,050,165	1,076,609	O-antigen	Saccharide	14%
NRPS	1,654,124	1,701,133	microcin H47	RiPP:Microcin	20%
RRE-containing	1,785,712	1,805,990	lankacidin C	NRP + Polyketide	13%
NRPS	1,827,873	1,874,287	pyrronazol B	NRP + Polyketide	9%
T1PKS,NRPS	2,436,069	2,498,066	althiomycin	NRP	100%
NRPS	3,858,692	3,913,460	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,695,729	4,755,684	vulnibactin	NRP	18%
NRPS-like,hserlactone	4,881,993	4,934,209	-	-	-
Serratia marcescens strain UMH10 chromosome, complete genome					
betalactone	60,785	86,453	-	-	-
thiopeptide	1,048,395	1,074,838	O-antigen	Saccharide	14%
NRPS	1,642,516	1,689,526	microcin H47	RiPP:Microcin	20%
RRE-containing	1,776,113	1,796,391	lankacidin C	NRP + Polyketide	13%
NRPS	1,818,797	1,865,274	pyrronazol B	NRP + Polyketide	9%
T1PKS,NRPS	2,436,245	2,498,248	althiomycin	NRP	100%
NRPS	3,948,603	4,003,373	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,812,232	4,872,188	vulnibactin	NRP	18%
NRPS-like,hserlactone	4,996,478	5,048,547	-	-	-
Serratia marcescens strain UMH11 chromosome, complete genome					
betalactone	60,785	86,453	-	-	-

thiopeptide	1,048,396	1,074,839	O-antigen	Saccharide	14%
NRPS	1,642,520	1,689,530	microcin H47	RiPP:Microcin	20%
RRE-containing	1,776,117	1,796,395	lankacidin C	NRP + Polyketide	13%
NRPS	1,818,801	1,865,278	pyrronazol B	NRP + Polyketide	9%
T1PKS,NRPS	2,436,248	2,498,251	althiomycin	NRP	100%
NRPS	3,948,606	4,003,376	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,812,235	4,872,191	vulnibactin	NRP	18%
NRPS-like,hserlactone	4,996,482	5,048,551	-	-	-
Serratia marcescens strain UMH12 chromosome, complete genome					
betalactone	60,784	86,452	-	-	-
thiopeptide	1,041,164	1,067,607	O-antigen	Saccharide	14%
NRPS	1,640,561	1,687,563	microcin H47	RiPP:Microcin	20%
RRE-containing	1,777,303	1,797,581	lankacidin C	NRP + Polyketide	13%
NRPS	1,819,465	1,865,716	pyrronazol B	NRP + Polyketide	9%
T1PKS,NRPS	2,558,541	2,620,538	althiomycin	NRP	100%
NRPS	3,989,895	4,044,666	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,828,128	4,888,083	vulnibactin	NRP	18%
NRPS-like,hserlactone	5,010,822	5,062,889	-	-	-
Serratia marcescens strain UMH2 chromosome, complete genome					
betalactone	61,013	86,681	-	-	-
thiopeptide	1,098,231	1,123,986	O-antigen	Saccharide	14%
RRE-containing	1,862,442	1,882,720	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,909,785	1,979,587	pyrronazol B	NRP + Polyketide	9%
NRPS	2,618,711	2,704,491	-	-	-
thiopeptide,LAP,NRPS	3,220,159	3,267,506	microcin E492	RiPP:Microcin	12%
NRPS	4,082,584	4,139,329	xenotetrapeptide	NRP	100%
hserlactone	4,688,976	4,709,650	-	-	-
NRPS	4,941,738	5,001,728	vulnibactin	NRP	12%
Serratia marcescens strain FDAARGOS_65 chromosome, complete genome					

NRPS	357,494	402,638	pyrronazol B	NRP + Polyketide	9%
RRE-containing	423,039	443,317	lankacidin C	NRP + Polyketide	13%
NRPS	525,965	572,683	colicin V	RiPP	1%
thiopeptide	1,190,014	1,216,455	O-antigen	Saccharide	14%
NRPS	**1,812,941**	**1,857,616**	**prodigiosin**	**Polyketide**	**12%**
betalactone	2,250,588	2,276,257	-	-	-
hserlactone	2,489,101	2,509,793	-	-	-
NRPS	2,664,903	2,722,606	vulnibactin	NRP	18%
NRPS	3,529,737	3,586,582	rhizomide A / rhizomide B / rhizomide C	NRP	100%
RiPP-like	4,442,267	4,454,813	-	-	-
NRPS	4,794,323	4,851,180	gobichelin A / gobichelin B	NRP	11%
NRPS	4,914,220	4,964,236	lipopolysaccharide	Saccharide:Lipopolysaccharide	5%
Serratia marcescens strain FDAARGOS_659 chromosome					
betalactone	103,673	129,343	-	-	-
redox-cofactor	306,443	326,929	lankacidin C	NRP + Polyketide	13%
prodigiosin	**481,796**	**516,816**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,095,484	1,121,928	O-antigen	Saccharide	14%
redox-cofactor	1,784,320	1,806,482	lankacidin C	NRP + Polyketide	13%
NRPS	1,820,062	1,867,803	pyrronazol B	NRP + Polyketide	9%
NRPS	2,504,556	2,548,312	-	-	-
NRPS	3,922,400	3,965,575	xantholipin	Polyketide	4%
NRPS	4,736,164	4,796,006	vulnibactin	NRP	18%
Serratia marcescens strain FY chromosome, complete genome					
NRPS	279,793	338,100	vulnibactin	NRP	12%
betalactone	689,261	714,929	-	-	-
redox-cofactor	894,323	915,612	lankacidin C	NRP + Polyketide	13%
prodigiosin	**1,068,190**	**1,103,210**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,687,236	1,713,680	O-antigen	Saccharide	14%
NRPS	2,283,030	2,328,314	microcin H47	RiPP:Microcin	20%

redox-cofactor	2,409,143	2,431,305	lankacidin C	NRP + Polyketide	13%
NRPS	2,434,744	2,481,565	turnerbactin	NRP	15%
NRPS	3,131,895	3,175,651	-	-	-
RiPP-like	3,619,671	3,632,199	-	-	-
NRPS	4,503,410	4,547,348	xantholipin	Polyketide	4%
Serratia marcescens strain FZSF02 chromosome, complete genome					
NRPS	292,086	351,080	vulnibactin	NRP	18%
betalactone	750,034	775,704	-	-	-
prodigiosin	**1,149,547**	**1,184,567**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,831,194	1,857,638	O-antigen	Saccharide	14%
redox-cofactor	2,572,385	2,594,547	lankacidin C	NRP + Polyketide	13%
NRPS	2,620,445	2,667,611	turnerbactin	NRP	15%
NRPS	3,333,029	3,376,799	-	-	-
NRPS	4,778,265	4,822,203	xantholipin	Polyketide	4%
Serratia marcescens strain ICU-2 chromosome					
hserlactone	68,823	89,497	-	-	-
NRPS-like	506,362	548,668	-	-	-
betalactone	769,294	794,963		-	-
NRPS	**1,145,167**	**1,189,833**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,727,664	1,754,102	O-antigen	Saccharide	14%
NRPS	2,309,939	2,356,426	colicin V	RiPP	1%
RRE-containing	2,427,864	2,448,142	lankacidin C	NRP + Polyketide	13%
NRPS	2,465,875	2,511,492	-	-	-
NRPS	4,473,726	4,521,571	syringopeptin 25A	NRP	100%
NRPS,T1PKS	4,756,503	4,811,124	-	-	--
Serratia marcescens strain ICU-3 chromosome					
betalactone	63,175	88,843	-	-	-
NRPS	**438,566**	**483,230**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,056,133	1,082,571	O-antigen	Saccharide	14%
NRPS	1,638,146	1,684,531	colicin V	RiPP	1%

RRE-containing	1,759,572	1,779,850	lankacidin C	NRP + Polyketide	13%
NRPS	2,495,657	2,543,793	-	-	-
NRPS	3,776,395	3,830,663	thanamycin	NRP:Beta-lactam	18%
NRPS,T1PKS	4,060,517	4,114,670	-	-	-
hserlactone	4,368,517	4,389,191	-	-	
NRPS	4,643,966	4,687,910	turnerbactin	NRP	23%
NRPS-like	4,843,178	4,886,165	-	-	-
Serratia marcescens strain ICU-4 chromosome					
betalactone	62,962	88,630	-	-	-
NRPS	**438,302**	**483,362**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,017,929	1,044,367	-	-	-
NRPS	1,600,569	1,645,273	colicin V	RiPP	1%
RRE-containing	1,720,103	1,740,381	lankacidin C	NRP + Polyketide	20%
NRPS	3,729,192	3,782,018	Le-pyrrolopyrazines	NRP	27%
NRPS	4,010,500	4,065,120	-	-	-
hserlactone	4,395,476	4,416,150	-	-	-
NRPS-like	4,848,420	4,890,712	-	-	-
NRPS-like	5,183,622	5,209,716	nannocystin a	NRP + Polyketide	21%
Serratia marcescens strain JW-CZ2 chromosome, complete genome					
NRPS	628,929	671,919	xantholipin	Polyketide	4%
NRPS	2,577,090	2,623,679	pyrronazol B	NRP + Polyketide	9%
redox-cofactor	2,658,049	2,680,211	lankacidin C	NRP + Polyketide	13%
NRPS	2,761,695	2,807,568	microcin H47	RiPP:Microcin	20%
thiopeptide	3,365,828	3,392,272	O-antigen	Saccharide	14%
prodigiosin	**3,972,294**	**4,007,314**	**prodigiosin**	**Polyketide**	**100%**
betalactone	4,352,236	4,377,906	-	-	-
hserlactone,NRPS-like	4,556,975	4,608,541	-	-	-
NRPS	4,730,868	4,790,691	vulnibactin	NRP	18%
Serratia marcescens strain KS10 chromosome					
NRPS	72,422	115,598	xantholipin	Polyketide	4%

NRPS	1,457,499	1,501,253	-	-	-
NRPS	2,147,430	2,193,947	pyrronazol B	NRP + Polyketide	9%
redox-cofactor	2,213,809	2,234,868	lankacidin C	NRP + Polyketide	13%
thiopeptide	2,987,155	3,013,599	O-antigen	Saccharide	14%
prodigiosin	**3,605,793**	**3,640,813**	**prodigiosin**	**Polyketide**	**100%**
redox-cofactor	3,793,379	3,815,541	lankacidin C	NRP + Polyketide	13%
betalactone	3,986,079	4,011,749	-	-	-
NRPS	4,400,917	4,460,758	vulnibactin	NRP	18%
Serratia marcescens strain LVF3 chromosome, complete genome					
NRPS	270,894	329,117	vulnibactin	NRP	18%
hserlactone	576,985	597,677	-	-	-
betalactone	787,022	812,711		-	-
thiopeptide	1,859,438	1,885,880	O-antigen	Saccharide	14%
RRE-containing	2,655,355	2,675,633	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	2,682,525	2,749,394	pyrronazol B	NRP + Polyketide	9%
NRPS	3,404,896	3,448,585	-	-	-
NRPS-like,arylpolyene	3,478,555	3,526,663	andrimid	NRP:Beta-lactam + Polyketide:Type II	95%
T1PKS	4,417,765	4,458,747	-	-	-
siderophore	4,658,418	4,670,277	-	-	-
NRPS	4,861,191	4,914,409	lokisin	NRP	21%
NRPS,T1PKS	5,146,930	5,201,552	-	-	-
Serratia marcescens strain WVU-002 chromosome, complete genome					
NRPS	262,689	321,011	vulnibactin	NRP	18%
NRPS-like	453,528	494,770	-	-	-
betalactone	711,400	737,069	-	-	-
NRPS,T1PKS	1,223,026	1,278,651	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,851,898	1,878,341	O-antigen	Saccharide	14%
RRE-containing	2,609,714	2,629,992	lankacidin C	NRP + Polyketide	13%
NRPS	2,651,206	2,698,989	pyrronazol B	NRP + Polyketide	9%

NRPS	3,340,206	3,425,890	-	-	-
NRPS	4,749,364	4,806,970	xenotetrapeptide	NRP	100%
Serratia marcescens strain WVU-004 chromosome, complete genome					
NRPS	262,725	321,047	vulnibactin	NRP	18%
NRPS-like	453,564	494,806	-	-	-
betalactone	711,436	737,105	-	-	-
NRPS,T1PKS	1,223,062	1,278,687	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,851,933	1,878,376	O-antigen	Saccharide	14%
RRE-containing	2,609,750	2,630,028	lankacidin C	NRP + Polyketide	13%
NRPS	2,651,242	2,699,025	pyrronazol B	NRP + Polyketide	9%
NRPS	3,340,242	3,425,926	-	-	-
NRPS	4,749,400	4,807,039	xenotetrapeptide	NRP	100%
Serratia marcescens strain WVU-007 chromosome, complete genome					
NRPS	262,733	321,048	vulnibactin	NRP	18%
NRPS-like	453,565	494,807	-	-	
betalactone	711,437	737,106	-	-	-
NRPS,T1PKS	1,222,702	1,278,328	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,851,576	1,878,019	O-antigen	Saccharide	14%
RRE-containing	2,643,878	2,664,156	lankacidin C	NRP + Polyketide	13%
NRPS	2,685,346	2,733,129	pyrronazol B	NRP + Polyketide	9%
NRPS	3,374,346	3,460,030	-	-	-
NRPS	4,766,976	4,824,828	xenotetrapeptide	NRP	100%
Serratia marcescens strain WVU-008 chromosome, complete genome					
betalactone	724,883	750,552	-	-	-
thiopeptide	1,856,534	1,882,971	O-antigen	Saccharide	14%
RRE-containing	2,589,923	2,610,201	lankacidin C	NRP + Polyketide	13%
NRPS	2,631,882	2,679,201	pyrronazol B	NRP + Polyketide	9%
NRPS	3,357,966	3,403,499			
NRPS	4,705,706	4,760,170	thanamycin	NRP:Beta-lactam	18%
Serratia marcescens strain WVU-009 chromosome, complete genome					

hserlactone	23,292	43,966	-	-	-
NRPS	290,044	347,904	vulnibactin	NRP	12%
betalactone	729,231	754,899	-	-	-
NRPS	**1,124,997**	**1,170,206**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,790,895	1,816,576	O-antigen	Saccharide	14%
RRE-containing	2,508,330	2,528,608	lankacidin C	NRP + Polyketide	13%
T1PKS	2,555,673	2,598,552	pyrronazol B	NRP + Polyketide	9%
NRPS	3,229,609	3,315,384	-	-	-
thiopeptide,LAP,NRPS	3,819,912	3,867,256	microcin E492	RiPP:Microcin	12%
NRPS	4,751,178	4,809,024	xenotetrapeptide	NRP	100%
Serratia marcescens strain WVU-010 chromosome, complete genome					
NRPS	262,701	321,016	vulnibactin	NRP	18%
NRPS-like	453,533	494,775	-	-	-
betalactone	711,405	737,074	-	-	-
NRPS,T1PKS	1,222,671	1,278,297	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,851,546	1,877,989	O-antigen	Saccharide	14%
RRE-containing	2,643,847	2,664,125	lankacidin C	NRP + Polyketide	13%
NRPS	2,685,315	2,733,098	pyrronazol B	NRP + Polyketide	9%
NRPS	3,374,315	3,459,999	-	-	-
NRPS	4,766,945	4,824,797	xenotetrapeptide	NRP	100%
Serratia marcescens strain YHYF1 chromosome, complete genome					
NRPS	263,161	321,984	vulnibactin	NRP	18%
NRPS-like,hserlactone	525,454	574,703	-	-	-
betalactone	781,253	806,923	-	-	-
prodigiosin	**1,150,979**	**1,186,005**	**prodigiosin**	**Polyketide**	**100%**
hserlactone	1,213,650	1,232,702	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,825,114	1,851,558	O-antigen	Saccharide	14%
NRPS	2,447,774	2,493,653	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,570,197	2,592,359	lankacidin C	NRP + Polyketide	13%
NRPS	2,623,653	2,671,574	pyrronazol B	NRP + Polyketide	9%

hserlactone	3,743,913	3,764,545	-	-	-
NRPS	4,745,728	4,789,663	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 chromosome, complete genome					
NRPS	1,114,925	1,158,447	xantholipin	Polyketide	4%
NRPS	1,954,807	2,013,424	vulnibactin	NRP	12%
NRPS-like	2,135,877	2,175,997	-	-	-
betalactone	2,413,728	2,439,399	-	-	-
prodigiosin	**2,794,945**	**2,829,965**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	3,423,043	3,449,487	O-antigen	Saccharide	14%
NRPS	4,023,898	4,070,909	microcin H47	RiPP:Microcin	20%
redox-cofactor	4,145,815	4,167,977	lankacidin C	NRP + Polyketide	13%
NRPS	4,197,325	4,245,835	pyrronazol B	NRP + Polyketide	9%
Serratia marcescens subsp. marcescens ATCC 13880 chromosome, complete genome					
NRPS	299,774	358,408	vulnibactin	NRP	12%
NRPS-like	480,866	520,990	-	-	-
betalactone	758,770	784,446	-	-	-
prodigiosin	**1,140,027**	**1,175,047**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,768,028	1,794,461	O-antigen	Saccharide	14%
NRPS-like,NRPS	2,368,303	2,415,283	microcin H47	RiPP:Microcin	20%
RRE-containing	2,491,195	2,511,473	lankacidin C	NRP + Polyketide	20%
NRPS	2,542,046	2,588,442	pyrronazol B	NRP + Polyketide	9%
NRPS	4,575,382	4,619,182	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S13_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	522,880	-	-	-
betalactone	759,910	785,581	-	-	-
prodigiosin	**1,141,128**	**1,176,148**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,769,229	1,795,673	O-antigen	Saccharide	14%
NRPS	2,370,087	2,417,098	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,492,004	2,514,166	lankacidin C	NRP + Polyketide	13%

NRPS	2,544,015	2,590,434	pyrronazol B	NRP + Polyketide	9%
NRPS	4,578,309	4,622,247	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S22_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,991	1,794,435	O-antigen	Saccharide	14%
NRPS	2,368,848	2,415,859	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,765	2,512,927	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,776	2,589,195	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,070	4,621,008	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S24_jyu2015 chromosome, complete genome					
NRPS	299,728	358,345	vulnibactin	NRP	12%
NRPS-like	480,798	522,879	-	-	-
betalactone	759,909	785,580	-	-	-
prodigiosin	**1,141,127**	**1,176,147**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,769,228	1,795,672	O-antigen	Saccharide	14%
NRPS	2,370,085	2,417,096	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,492,002	2,514,164	lankacidin C	NRP + Polyketide	13%
NRPS	2,544,013	2,590,432	pyrronazol B	NRP + Polyketide	9%
NRPS	4,578,307	4,622,245	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S28_jyu2015 chromosome, complete genome					
NRPS	299,728	358,345	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,970	1,794,414	O-antigen	Saccharide	14%
NRPS	2,368,827	2,415,838	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,744	2,512,906	lankacidin C	NRP + Polyketide	13%

NRPS	2,542,755	2,589,174	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,049	4,620,987	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S33_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,971	1,794,415	O-antigen	Saccharide	14%
NRPS	2,368,828	2,415,839	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,745	2,512,907	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,756	2,589,175	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,050	4,620,988	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S37_jyu2015 chromosome, complete genome					
NRPS	299,728	358,345	vulnibactin	NRP	12%
NRPS-like	480,798	520,919	-	-	-
betalactone	758,650	784,321	-	-	-
prodigiosin	**1,139,868**	**1,174,888**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,969	1,794,413	O-antigen	Saccharide	14%
NRPS	2,368,826	2,415,837	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,743	2,512,905	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,754	2,589,173	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,039	4,620,977	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S57_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,970	1,794,414	O-antigen	Saccharide	14%
NRPS	2,368,828	2,415,839	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,745	2,512,907	lankacidin C	NRP + Polyketide	13%

NRPS	2,542,756	2,589,175	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,050	4,620,988	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S60_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,769,249	1,795,693	O-antigen	Saccharide	14%
NRPS	2,370,106	2,417,117	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,492,023	2,514,185	lankacidin C	NRP + Polyketide	13%
NRPS	2,544,034	2,590,453	pyrronazol B	NRP + Polyketide	9%
NRPS	4,578,328	4,622,266	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S64_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,969	1,794,413	O-antigen	Saccharide	14%
NRPS	2,368,825	2,415,836	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,742	2,512,904	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,753	2,589,172	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,047	4,620,985	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S65_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,970	1,794,414	O-antigen	Saccharide	14%
NRPS	2,368,827	2,415,838	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,744	2,512,906	lankacidin C	NRP + Polyketide	13%

NRPS	2,542,755	2,589,174	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,049	4,620,987	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S67_jyu2015 chromosome, complete genome					
NRPS	299,730	358,347	vulnibactin	NRP	12%
NRPS-like	480,800	520,921	-	-	-
betalactone	758,652	784,323	-	-	-
prodigiosin	**1,139,870**	**1,174,890**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,971	1,794,415	O-antigen	Saccharide	14%
NRPS	2,368,828	2,415,839	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,745	2,512,907	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,756	2,589,175	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,050	4,620,988	xantholipin	Polyketide	4%
Serratia marcescens strain BP2 chromosome, complete genome					
NRPS	317,234	375,724	vulnibactin	NRP	18%
betalactone	794,673	820,343	-	-	-
redox-cofactor	1,023,821	1,044,475	lankacidin C	NRP + Polyketide	13%
NRPS,prodigiosin	**1,183,642**	**1,244,504**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,825,954	1,852,398	O-antigen	Saccharide	14%
redox-cofactor	2,516,897	2,539,059	lankacidin C	NRP + Polyketide	13%
NRPS	2,553,833	2,602,040	pyrronazol B	NRP + Polyketide	9%
NRPS	3,237,153	3,280,921	-	-	-
arylpolyene	4,549,763	4,593,359	aryl polyenes	Other	100%
NRPS	4,600,446	4,644,384	xantholipin	Polyketide	4%
Serratia marcescens strain BWH-23 chromosome, complete genome					
hserlactone	488,965	509,657	-	-	-
betalactone	692,180	717,848	-	-	-
thiopeptide	1,666,597	1,693,040	O-antigen	Saccharide	14%
NRPS	2,286,156	2,333,168	microcin H47	RiPP:Microcin	20%
RRE-containing	2,424,572	2,444,850	lankacidin C	NRP + Polyketide	13%
NRPS	2,466,729	2,513,234	pyrronazol B	NRP + Polyketide	9%

T1PKS,NRPS	3,072,479	3,134,476	althiomycin	NRP	100%
NRPS	4,516,202	4,573,982	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain BWH-35 chromosome, complete genome					
NRPS	267,647	326,056	turnerbactin	NRP	30%
NRPS-like	440,636	482,648	-	-	-
betalactone	685,071	710,741	-	-	-
thiopeptide	1,794,394	1,820,836	O-antigen	Saccharide	14%
siderophore	1,970,686	1,982,545	-	-	-
redox-cofactor	2,540,914	2,563,076	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	3,235,806	3,298,743	althiomycin	NRP	100%
NRPS	3,425,499	3,470,698	-	-	-
NRPS	4,664,694	4,722,546	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain Byron chromosome, complete genome					
redox-cofactor	381,296	402,268	-	-	-
NRPS	420,707	467,120	pyrronazol B	NRP + Polyketide	9%
NRPS	1,137,641	1,181,410	-	-	-
NRPS	2,502,197	2,545,372	xantholipin	Polyketide	4%
NRPS	3,322,988	3,382,806	vulnibactin	NRP	18%
hserlactone	3,556,360	3,577,052	-	-	-
betalactone	3,776,439	3,802,109	-	--	-
redox-cofactor	3,999,108	4,021,270	lankacidin C	NRP + Polyketide	13%
prodigiosin	**4,173,842**	**4,208,862**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	4,813,843	4,840,287	O-antigen	Saccharide	14%
Serratia marcescens strain C110 chromosome, complete genome					
NRPS	292,398	350,101	vulnibactin	NRP	18%
NRPS-like	474,519	516,298	-	-	-
betalactone	772,672	798,341	-	-	-
NRPS	**1,191,320**	**1,235,994**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,833,432	1,859,873	O-antigen	Saccharide	14%

NRPS	2,548,027	2,594,726	colicin V	RiPP	1%
RRE-containing	2,679,397	2,699,675	lankacidin C	NRP + Polyketide	13%
NRPS	2,719,864	2,765,007	pyrronazol B	NRP + Polyketide	9%
NRPS	3,407,170	3,456,720	lipopolysaccharide	Saccharide:Lipopolysaccharide	5%
NRPS	3,519,912	3,576,769	gobichelin A / gobichelin B	NRP	11%
RiPP-like	3,918,458	3,931,004	-	-	-
NRPS	4,829,833	4,887,685	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain CM2012_028 chromosome, complete genome					
NRPS	296,036	354,916	vulnibactin	NRP	18%
NRPS-like,hserlactone	478,540	530,525	-	-	-
betalactone	722,031	747,701	-	-	-
redox-cofactor	924,975	946,345	lankacidin C	NRP + Polyketide	13%
prodigiosin	**1,108,577**	**1,143,597**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,745,599	1,772,043	O-antigen	Saccharide	14%
NRPS	2,314,745	2,360,618	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,436,200	2,458,362	lankacidin C	NRP + Polyketide	13%
NRPS	2,486,711	2,533,972	pyrronazol B	NRP + Polyketide	9%
NRPS	4,501,602	4,545,537	xantholipin	Polyketide	4%
Serratia marcescens strain E28 chromosome, complete genome					
NRPS	283,349	342,070	vulnibactin	NRP	12%
NRPS-like	467,913	510,130	-	-	-
betalactone	713,591	739,261	-	-	-
thiopeptide	1,774,004	1,800,446	O-antigen	Saccharide	14%
NRPS	2,378,990	2,426,161	colicin V	RiPP	1%
redox-cofactor	2,499,931	2,522,093	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	3,228,504	3,335,305	althiomycin	NRP	87%
NRPS	4,854,739	4,912,591	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain EL1 chromosome					
redox-cofactor	517,325	538,384	lankacidin C	NRP + Polyketide	13%

NRPS	558,246	604,763	pyrronazol B	NRP + Polyketide	9%
NRPS	1,250,939	1,294,693	-	-	-
NRPS	2,636,589	2,679,765	xantholipin	Polyketide	4%
NRPS	3,481,117	3,540,958	vulnibactin	NRP	18%
betalactone	3,930,125	3,955,795	-	-	-
redox-cofactor	4,126,334	4,148,496	lankacidin C	NRP + Polyketide	13%
prodigiosin	**4,301,062**	**4,336,082**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	4,928,283	4,954,727	O-antigen	Saccharide	14%
Serratia marcescens strain ESE2014 chromosome, complete genome					
NRPS	297,033	355,150	vulnibactin	NRP	12%
NRPS-like	478,197	520,531	-	-	-
betalactone	723,420	749,089	-	-	-
prodigiosin	**1,098,550**	**1,133,570**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,720,096	1,746,540	O-antigen	Saccharide	14%
NRPS	2,335,218	2,382,230	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,456,818	2,478,980	lankacidin C	NRP + Polyketide	13%
NRPS	2,508,322	2,554,704	pyrronazol B	NRP + Polyketide	9%
NRPS	4,520,162	4,564,100	xantholipin	Polyketide	4%
Serratia marcescens strain SJC1058 genome assembly, chromosome: 1					
T1PKS,NRPS	1	44,141	althiomycin	NRP	100%
NRPS	109,836	154,929	-	-	-
NRPS	220,189	266,246	yersiniabactin	NRP + Polyketide	4%
NRPS	1,595,548	1,653,111	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	2,501,455	2,561,446	vulnibactin	NRP	12%
NRPS-like	2,684,756	2,727,737	-	-	-
RRE-containing	2,734,486	2,749,147	-	-	-
betalactone	2,955,862	2,981,531	-	-	-
thiopeptide	4,008,799	4,035,242	O-antigen	Saccharide	14%
siderophore	4,220,889	4,232,748	-	-	-

redox-cofactor	4,803,993	4,826,155	lankacidin C	NRP + Polyketide	13%
Serratia marcescens strain SJC1061 genome assembly, chromosome: 1					
betalactone	783,606	809,275	-	-	-
RRE-containing	1,015,990	1,030,651	-	-	-
NRPS-like	1,037,826	1,080,013	-	-	-
NRPS	1,204,183	1,263,156	vulnibactin	NRP	12%
NRPS	2,112,187	2,169,750	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	3,499,014	3,545,071	yersiniabactin	NRP + Polyketide	4%
NRPS	3,610,331	3,655,424	-	-	-
NRPS,T1PKS	3,721,010	3,784,186	althiomycin	NRP	100%
redox-cofactor	4,418,418	4,440,580	lankacidin C	NRP + Polyketide	13%
siderophore	5,011,991	5,023,850	-	-	-
thiopeptide	5,209,496	5,235,939	O-antigen	Saccharide	14%
Serratia marcescens strain SJC1062 genome assembly, chromosome: 1					
T1PKS,NRPS	1	44,104	althiomycin	NRP	100%
NRPS	109,799	154,892	-	-	-
NRPS	220,152	266,209	yersiniabactin	NRP + Polyketide	4%
NRPS	1,597,119	1,653,075	xenoamicin A / xenoamicin B	NRP:Cyclic depsipeptide	20%
NRPS	2,501,419	2,561,410	vulnibactin	NRP	12%
NRPS-like	2,684,720	2,727,701	-	-	-
RRE-containing	2,734,450	2,749,111	-	-	-
betalactone	2,955,826	2,981,495	-	-	-
thiopeptide	4,008,768	4,035,211	O-antigen	Saccharide	14%
siderophore	4,220,858	4,232,717	-	-	-
redox-cofactor	4,804,126	4,826,288	lankacidin C	NRP + Polyketide	13%
Serratia marcescens strain SJC1070 genome assembly, chromosome: 1					
T1PKS,NRPS	1	44,120	althiomycin	NRP	100%
NRPS	109,815	154,908	-	-	-
NRPS	220,168	266,225	yersiniabactin	NRP + Polyketide	4%

NRPS	1,595,597	1,653,160	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	2,501,504	2,561,495	vulnibactin	NRP	12%
NRPS-like	2,684,805	2,727,786	-	-	-
RRE-containing	2,734,535	2,749,196	-	-	-
betalactone	2,955,911	2,981,580	-	-	-
thiopeptide	4,008,853	4,035,296	O-antigen	Saccharide	14%
siderophore	4,220,943	4,232,802	-	-	-
redox-cofactor	4,804,214	4,826,376	lankacidin C	NRP + Polyketide	13%
Serratia marcescens strain SJC1039 genome assembly, chromosome: 1					
thiopeptide	254,427	280,868	O-antigen	Saccharide	14%
NRPS	823,613	870,322	colicin V	RiPP	1%
RRE-containing	938,792	959,070	lankacidin C	NRP + Polyketide	13%
NRPS	977,344	1,023,806	turnerbactin	NRP	15%
NRPS	1,638,664	1,687,777	-	-	-
NRPS	2,992,156	3,049,002	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS,T1PKS	3,271,856	3,326,021	-	-	-
NRPS	3,836,196	3,894,716	vulnibactin	NRP	18%
NRPS-like	4,008,260	4,050,681	-	-	-
betalactone	4,282,738	4,308,407	-	-	-
NRPS	**4,649,548**	**4,695,256**	**prodigiosin**	**Polyketide**	**12%**
Serratia marcescens strain SJC1043 genome assembly, chromosome: 1					
NRPS	291,794	351,526	vulnibactin	NRP	12%
NRPS-like	475,241	517,428	-	-	-
RRE-containing	524,603	539,264	-	-	-
betalactone	745,983	771,652	-	-	-
thiopeptide	1,842,231	1,868,674	O-antigen	Saccharide	14%
siderophore	2,054,320	2,066,179	-	-	-
redox-cofactor	2,592,522	2,614,684	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	3,247,736	3,310,803	althiomycin	NRP	100%

NRPS	3,376,498	3,421,591	-	-	-
NRPS	3,486,851	3,532,908	yersiniabactin	NRP + Polyketide	4%
NRPS	4,820,546	4,875,176	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain SJC1044 genome assembly, chromosome: 1					
thiopeptide	249,745	276,188	O-antigen	Saccharide	14%
siderophore	461,835	473,694	-	-	-
redox-cofactor	1,000,037	1,022,199	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,655,251	1,718,318	althiomycin	NRP	100%
NRPS	1,784,013	1,829,106	-	-	-
NRPS	1,894,366	1,940,423	yersiniabactin	NRP + Polyketide	4%
NRPS	3,229,611	3,282,345	orfamide A / orfamide C	NRP:Cyclic depsipeptide	17%
NRPS	4,131,882	4,191,873	vulnibactin	NRP	12%
NRPS-like	4,315,183	4,358,164	-	-	-
RRE-containing	4,362,811	4,383,077	-	-	-
betalactone	4,586,293	4,611,962	-	-	-
Serratia marcescens strain SJC1045 genome assembly, chromosome: 1					
thiopeptide	249,682	276,125	O-antigen	Saccharide	14%
siderophore	461,772	473,631	-	-	-
redox-cofactor	999,974	1,022,136	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,655,221	1,718,288	althiomycin	NRP	100%
NRPS	1,783,983	1,829,076	-	-	-
NRPS	1,894,336	1,940,393	yersiniabactin	NRP + Polyketide	4%
NRPS	3,228,025	3,282,366	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,131,903	4,191,894	vulnibactin	NRP	12%
NRPS-like	4,315,204	4,358,185	-	-	-
RRE-containing	4,362,832	4,383,098	-	-	-
betalactone	4,586,314	4,611,983	-	-	-
Serratia marcescens strain SJC1046 genome assembly, chromosome: 1					
redox-cofactor	653,517	675,679	lankacidin C	NRP + Polyketide	13%

siderophore	1,244,161	1,256,020	-		
thiopeptide	1,441,667	1,468,110	O-antigen	Saccharide	14%
betalactone	2,499,957	2,525,626	-	-	-
RRE-containing	2,728,838	2,749,104	-	-	-
NRPS-like	2,754,177	2,796,364	-	-	-
NRPS	2,920,079	2,979,346	vulnibactin	NRP	12%
NRPS	3,821,868	3,879,431	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	5,210,183	5,256,240	yersiniabactin	NRP + Polyketide	4%
NRPS	5,321,500	5,366,593	-	-	--
NRPS,T1PKS	5,432,179	5,476,370	althiomycin	NRP	100%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S68_jyu2015 chromosome, complete genome					
NRPS	299,728	358,345	vulnibactin	NRP	12%
NRPS-like	480,798	520,919	-	-	-
betalactone	758,650	784,321	-	-	-
prodigiosin	**1,139,868**	**1,174,888**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,970	1,794,414	O-antigen	Saccharide	14%
NRPS	2,368,827	2,415,838	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,744	2,512,906	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,755	2,589,174	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,049	4,620,987	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S6_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,971	1,794,415	O-antigen	Saccharide	14%
NRPS	2,368,828	2,415,839	microcin H47	RiPP:Microcin	20%

redox-cofactor	2,490,745	2,512,907	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,756	2,589,175	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,050	4,620,988	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S71_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,991	1,794,435	O-antigen	Saccharide	14%
NRPS	2,368,848	2,415,859	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,765	2,512,927	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,776	2,589,195	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,070	4,621,008	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S78_jyu2015 chromosome, complete genome					
NRPS	299,730	358,347	vulnibactin	NRP	12%
NRPS-like	480,800	520,921	-	-	-
betalactone	758,653	784,325	-	-	-
prodigiosin	**1,139,872**	**1,174,892**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,952	1,794,396	O-antigen	Saccharide	14%
NRPS	2,368,809	2,415,821	microcin E492	RiPP:Microcin	18%
redox-cofactor	2,490,727	2,512,889	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,738	2,589,157	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,032	4,620,970	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S79_jyu2015 chromosome, complete genome					
NRPS	299,728	358,345	vulnibactin	NRP	12%
NRPS-like	480,798	522,879	-	-	-
betalactone	759,909	785,580	-	-	-

prodigiosin	**1,141,127**	**1,176,147**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,769,207	1,795,651	O-antigen	Saccharide	14%
NRPS	2,370,064	2,417,075	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,491,981	2,514,143	lankacidin C	NRP + Polyketide	13%
NRPS	2,543,992	2,590,411	pyrronazol B	NRP + Polyketide	9%
NRPS	4,578,286	4,622,224	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S81_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,870**	**1,174,890**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,972	1,794,416	O-antigen	Saccharide	14%
NRPS	2,368,829	2,415,840	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,746	2,512,908	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,757	2,589,176	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,051	4,620,989	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S89_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,870**	**1,174,890**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,971	1,794,415	O-antigen	Saccharide	14%
NRPS	2,368,828	2,415,839	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,745	2,512,907	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,756	2,589,175	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,050	4,620,988	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S94_jyu2015 chromosome, complete genome					

NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	480,799	520,920	-	-	-
betalactone	758,651	784,322	-	-	-
prodigiosin	**1,139,869**	**1,174,889**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,979	1,794,423	O-antigen	Saccharide	14%
NRPS	2,368,836	2,415,847	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,753	2,512,915	lankacidin C	NRP + Polyketide	13%
NRPS	2,542,764	2,589,183	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,058	4,620,996	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S95_jyu2015 chromosome, complete genome					
NRPS	299,729	358,346	vulnibactin	NRP	12%
NRPS-like	482,058	522,179	-	-	-
betalactone	759,910	785,581	-	-	-
prodigiosin	**1,141,128**	**1,176,148**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,769,250	1,795,694	O-antigen	Saccharide	14%
NRPS	2,370,107	2,417,118	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,492,024	2,514,186	lankacidin C	NRP + Polyketide	13%
NRPS	2,544,035	2,590,454	pyrronazol B	NRP + Polyketide	9%
NRPS	4,578,329	4,622,267	xantholipin	Polyketide	4%
Serratia marcescens subsp. marcescens ATCC 13880 substr. Sm_S96_jyu2015 chromosome, complete genome					
NRPS	299,730	358,347	vulnibactin	NRP	12%
NRPS-like	480,800	520,921	-	-	-
betalactone	758,652	784,323	-	-	-
prodigiosin	**1,139,870**	**1,174,890**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,767,971	1,794,415	O-antigen	Saccharide	14%
NRPS	2,368,828	2,415,839	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,490,745	2,512,907	lankacidin C	NRP + Polyketide	13%

NRPS	2,542,756	2,589,175	pyrronazol B	NRP + Polyketide	9%
NRPS	4,577,050	4,620,988	xantholipin	Polyketide	4%
Serratia marcescens strain SCH909 chromosome, complete genome					
NRPS,T1PKS	273,948	359,632	vulnibactin	NRP	12%
NRPS-like	473,624	515,317	-	-	-
betalactone	735,092	760,761	-	-	-
thiopeptide	1,902,742	1,929,183	O-antigen	Saccharide	14%
RRE-containing	2,616,697	2,636,975	lankacidin C	NRP + Polyketide	13%
NRPS	2,651,856	2,698,162	-	-	-
NRPS	3,347,252	3,397,034	-	-	-
NRPS	4,733,280	4,791,132	xenotetrapeptide	NRP	100%
Serratia marcescens strain SCQ1 chromosome, complete genome					
NRPS	821,856	865,151	xantholipin	Polyketide	4%
NRPS	1,637,989	1,696,809	vulnibactin	NRP	18%
NRPS-like	1,820,133	1,861,342	-	-	-
betalactone	2,063,158	2,088,830	-	-	-
prodigiosin	**2,434,448**	**2,469,468**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	3,055,132	3,081,576	O-antigen	Saccharide	14%
NRPS	3,631,603	3,677,389	microcin H47	RiPP:Microcin	20%
RRE-containing	3,756,132	3,776,410	lankacidin C	NRP + Polyketide	13%
NRPS	3,805,939	3,854,449	pyrronazol B	NRP + Polyketide	9%
Serratia marcescens strain SGAir0764 chromosome, complete genome					
NRPS	271,596	330,471	vulnibactin	NRP	18%
NRPS-like	566,069	607,775	-	-	-
betalactone	805,220	830,890	-	-	-
prodigiosin	**1,159,270**	**1,194,290**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,763,450	1,789,894	O-antigen	Saccharide	14%

NRPS	2,348,426	2,392,145	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,469,253	2,491,415	lankacidin C	NRP + Polyketide	13%
NRPS	2,516,490	2,562,713	pyrronazol B	NRP + Polyketide	9%
NRPS	4,574,971	4,618,909	xantholipin	Polyketide	4%
RiPP-like	4,929,853	4,942,384	-	-	-
Serratia marcescens strain SMBC50 chromosome, complete genome					
NRPS	267,723	325,426	vulnibactin	NRP	18%
NRPS-like	449,844	491,623	-	-	-
betalactone	747,997	773,666	-	-	-
NRPS	**1,166,644**	**1,211,318**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,808,511	1,834,952	O-antigen	Saccharide	14%
NRPS	2,558,492	2,605,191	colicin V	RiPP	1%
RRE-containing	2,689,862	2,710,140	lankacidin C	NRP + Polyketide	13%
NRPS	2,730,329	2,775,472	pyrronazol B	NRP + Polyketide	9%
NRPS	3,452,973	3,502,523	lipopolysaccharide	Saccharide:Lipopolysaccharide	5%
NRPS	3,565,715	3,622,572	gobichelin A / gobichelin B	NRP	11%
RiPP-like	3,962,059	3,974,605	-	-	-
NRPS	4,570,125	4,627,977	rhizomide A / rhizomide B / rhizomide C	NRP	100%
Serratia marcescens strain SMNSF-1 chromosome, complete genome					
NRPS	298,033	356,999	vulnibactin	NRP	18%
NRPS-like	485,301	524,943	-	-	-
betalactone	783,151	808,821	-	-	-
prodigiosin	**1,164,832**	**1,199,858**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,768,432	1,794,876	O-antigen	Saccharide	14%
NRPS	2,379,367	2,425,790	microcin H47	RiPP:Microcin	20%

redox-cofactor	2,499,844	2,522,006	lankacidin C	NRP + Polyketide	13%
NRPS	2,549,550	2,598,060	pyrronazol B	NRP + Polyketide	9%
Serratia marcescens strain SmUNAM836 chromosome, complete sequence					
betalactone	61,653	87,322	-	-	-
NRPS	**429,252**	**473,901**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,118,087	1,144,529	O-antigen	Saccharide	14%
NRPS	1,734,087	1,780,797	colicin V	RiPP	1%
RRE-containing	1,869,032	1,889,310	lankacidin C	NRP + Polyketide	13%
NRPS	1,903,877	1,950,692	-	-	-
NRPS	2,614,272	2,663,290	-	-	-
NRPS	3,981,217	4,038,065	rhizomide A / rhizomide B / rhizomide C	NRP	100%
NRPS	4,802,707	4,862,536	vulnibactin	NRP	18%
NRPS-like,hserlactone	4,973,901	5,026,128	-	-	-
Serratia marcescens strain Sys06 chromosome, complete genome					
NRPS	310,758	369,305	vulnibactin	NRP	18%
betalactone	745,030	770,699	-	-	-
NRPS,prodigiosin	**1,135,249**	**1,196,122**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,781,008	1,807,452	O-antigen	Saccharide	14%
NRPS	2,463,253	2,508,769	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,581,007	2,603,169	lankacidin C	NRP + Polyketide	13%
NRPS	2,613,058	2,661,199	-	-	-
NRPS	3,327,405	3,403,931	ravidomycin	Polyketide	5%
NRPS	4,881,352	4,925,290	xantholipin	Polyketide	4%
Serratia marcescens strain U36365 chromosome, complete genome					
NRPS	288,656	329,856	enterobactin	NRP	12%
betalactone	707,762	733,430	-	-	-

RRE-containing	929,883	949,788	lankacidin C	NRP + Polyketide	13%
NRPS,prodigiosin	**1,102,061**	**1,162,917**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,745,141	1,771,583	O-antigen	Saccharide	14%
NRPS	2,337,950	2,383,545	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,464,738	2,486,900	lankacidin C	NRP + Polyketide	13%
NRPS	2,495,912	2,543,838	vanchrobactin	NRP	20%
NRPS	3,197,799	3,274,199	ravidomycin	Polyketide	5%
NRPS	4,574,674	4,618,612	xantholipin	Polyketide	4%
Serratia marcescens 2020-O-9 DNA, complete genome					
NRPS	263,474	322,000	vulnibactin	NRP	18%
NRPS-like,hserlactone	435,964	487,457	-	-	-
betalactone	713,611	739,280	-	-	-
NRPS	**1,129,447**	**1,174,122**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,827,365	1,853,806	O-antigen	Saccharide	14%
NRPS	2,453,865	2,500,576	colicin V	RiPP	1%
RRE-containing	2,572,053	2,592,331	lankacidin C	NRP + Polyketide	13%
NRPS	2,610,205	2,654,669	-	-	-
NRPS	3,343,672	3,392,693	-	-	-
NRPS	4,863,317	4,920,677	xenotetrapeptide	NRP	100%
Serratia marcescens AS-1 DNA, complete genome					
NRPS	300,445	359,422	vulnibactin	NRP	18%
NRPS-like	485,553	525,366	-	-	-
betalactone	768,048	793,718	-	-	-
prodigiosin	**1,122,547**	**1,157,558**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,727,800	1,754,244	O-antigen	Saccharide	14%
NRPS	2,308,311	2,354,183	microcin H47	RiPP:Microcin	20%
redox-cofactor	2,429,962	2,452,124	lankacidin C	NRP + Polyketide	13%

NRPS	2,480,922	2,527,585	pyrronazol B	NRP + Polyketide	9%
NRPS	4,530,605	4,574,540	xantholipin	Polyketide	4%
Serratia marcescens ATCC 274 DNA, complete genome					
NRPS	274,433	333,005	vulnibactin	NRP	12%
NRPS-like	458,734	498,640	-	-	-
betalactone	719,523	745,192	-	-	-
prodigiosin	**1,087,690**	**1,122,710**	**prodigiosin**	**Polyketide**	**100%**
thiopeptide	1,732,825	1,759,268	O-antigen	Saccharide	14%
NRPS	2,311,585	2,358,592	microcin E492	RiPP:Microcin	12%
redox-cofactor	2,433,927	2,456,089	lankacidin C	NRP + Polyketide	13%
NRPS	2,484,591	2,531,445	pyrronazol B	NRP + Polyketide	9%
NRPS	4,604,519	4,648,289	xantholipin	Polyketide	4%
Serratia marcescens isolate GN26 chromosome					
NRPS	**213,720**	**258,396**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	896,329	922,771	O-antigen	Saccharide	14%
NRPS	1,465,562	1,512,278	colicin V	RiPP	1%
RRE-containing	1,583,452	1,603,730	lankacidin C	NRP + Polyketide	13%
NRPS	1,618,612	1,664,234	turnerbactin	NRP	15%
NRPS	2,320,263	2,369,375	-	-	-
NRPS	3,675,927	3,732,796	xenotetrapeptide	NRP	100%
NRPS,T1PKS	3,966,368	4,020,760	-	-	-
hserlactone	4,275,438	4,296,112	-	-	-
NRPS	4,526,981	4,586,804	vulnibactin	NRP	18%
NRPS-like	4,699,145	4,742,132	-	-	-
betalactone	4,971,369	4,997,038	-	-	-
Serratia marcescens isolate PWN146_assembly genome assembly, chromosome: Chromosome					
betalactone	60,892	86,559	-	-	-

NRPS,T1PKS	546,260	622,499	olimycin A / olimycin B	Polyketide	5%
thiopeptide	1,196,198	1,222,640	O-antigen	Saccharide	14%
NRPS	1,775,544	1,822,844	microcin E492	RiPP:Microcin	18%
RRE-containing	1,899,914	1,920,192	lankacidin C	NRP + Polyketide	13%
T1PKS,NRPS	1,929,414	1,999,831	pyrronazol B	NRP + Polyketide	9%
T1PKS,NRPS	2,596,947	2,660,035	althiomycin	NRP	100%
NRPS	2,726,955	2,772,474	-	-	-
siderophore	3,951,781	3,963,640	-	-	-
NRPS	4,147,563	4,204,049	xenotetrapeptide	NRP	100%
NRPS	5,033,555	5,093,384	vulnibactin	NRP	18%
RiPP-like	5,200,901	5,213,138	-	-	-
Serratia marcescens SM39 DNA, complete genome					
betalactone	60,877	86,546	-	-	-
NRPS	**476,718**	**521,393**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,171,529	1,197,979	O-antigen	Saccharide	14%
NRPS	1,764,120	1,810,831	colicin V	RiPP	1%
RRE-containing	1,882,308	1,902,586	lankacidin C	NRP + Polyketide	13%
NRPS	1,920,322	1,964,924	-	-	-
NRPS	2,609,074	2,658,095	-	-	-
NRPS	3,982,793	4,039,646	xenotetrapeptide	NRP	100%
NRPS	4,835,798	4,895,615	vulnibactin	NRP	18%
NRPS-like,hserlactone	5,008,228	5,060,300	-	-	-
Serratia marcescens SMB2099 complete genome					
NRPS	319,342	378,038	vulnibactin	NRP	18%
NRPS-like	492,592	535,160	-	-	-
betalactone	787,697	813,366	-	-	-
NRPS	**1,154,309**	**1,198,985**	**prodigiosin**	**Polyketide**	**12%**

thiopeptide	1,804,409	1,830,851	O-antigen	Saccharide	14%
NRPS	2,373,641	2,420,358	colicin V	RiPP	1%
RRE-containing	2,491,533	2,511,811	lankacidin C	NRP + Polyketide	13%
NRPS	2,526,716	2,572,914	vanchrobactin	NRP	20%
NRPS	3,193,684	3,242,795	-	-	-
NRPS	4,593,237	4,650,089	xenoamicin A / xenoamicin B	NRP:Cyclic depsipeptide	20%
NRPS,T1PKS	4,881,757	4,936,379	-	-	-
Serratia marcescens strain 11/2010 chromosome, complete genome					
NRPS	282,874	341,107	vulnibactin	NRP	18%
NRPS-like	454,922	497,028	-	-	-
betalactone	701,219	726,888	-	-	-
thiopeptide	1,733,192	1,759,635	O-antigen	Saccharide	14%
RRE-containing	2,533,651	2,553,929	lankacidin C	NRP + Polyketide	13%
NRPS	2,574,600	2,622,335	pyrronazol B	NRP + Polyketide	9%
NRPS	3,269,618	3,355,308	-	-	-
lanthipeptide-class-i	3,384,824	3,412,657	yersiniabactin	NRP + Polyketide	2%
NRPS,butyrolactone	4,789,483	4,849,143	xenotetrapeptide	NRP	100%
Serratia marcescens strain 1140- chromosome, complete genome					
NRPS	292,397	350,100	vulnibactin	NRP	18%
NRPS-like	474,518	516,297	-	-	-
betalactone	772,671	798,340	-	-	-
NRPS	**1,191,319**	**1,235,993**	**prodigiosin**	**Polyketide**	**12%**
thiopeptide	1,833,431	1,859,872	O-antigen	Saccharide	14%
NRPS	2,548,192	2,594,891	colicin V	RiPP	1%
RRE-containing	2,679,562	2,699,840	lankacidin C	NRP + Polyketide	13%
NRPS	2,720,029	2,765,172	pyrronazol B	NRP + Polyketide	9%

NRPS	3,407,335	3,456,885	lipopolysaccharide	Saccharide:Lipopolysaccharide	5%
NRPS	3,520,077	3,576,934	gobichelin A / gobichelin B	NRP	11%
RiPP-like	3,918,624	3,931,170	-	-	-
NRPS	4,831,097	4,888,949	rhizomide A / rhizomide B / rhizomide C	NRP	100%