

**Table S1.** Natural ten-membered lactones and their origins

#	Compounds	Natural Source	Tested Activity*	Taxonomy Kingdom / Phylum (Class, Order)	Molecular Formula	M/W, Da	Comments
1	(3Z,5S,6E,9S,10R)-8-chloro-5,9-dihydroxy-10-methyl-5,8,9,10-tetrahydro-2H-oxecin-2-one	<i>Curvularia</i> sp. 768 <sup>1</sup> <i>Rousoella siamensis</i> SYSU-MS4723 <sup>2</sup>	Antialgal – n/a <sup>1</sup> Antibacterial – n/a <sup>1</sup> Antifungal – n/a <sup>1</sup> Anti-inflammatory – n/a <sup>2</sup> Cytotoxic – n/a <sup>2</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>13</sub> ClO <sub>4</sub>	232	A chlorine-containing TML, a possible artifact formed during extraction <i>Curvularia</i> sp. 768 with methylene chloride. <sup>1</sup> However, its isolation from the ethyl acetate extract of <i>Rousoella siamensis</i> SYSU-MS4723 <sup>2</sup> indicated the natural origin of this compound.
2	(4S,5R,10R)-4-hydroxy-5-methoxy-10-methyloxecane-2,7-dione	<i>Cordyceps militaris</i> BCC 2816 <sup>3</sup>	Antiparasitic – n/a <sup>3</sup>	Fungi / <i>Ascomycota</i>	C <sub>11</sub> H <sub>18</sub> O <sub>5</sub>	230	
3	(4S,5S,10R)-4-hydroxy-5-methoxy-10-methyloxecane-2,7-dione	<i>Cordyceps militaris</i> BCC 2816 <sup>3</sup>	Antiparasitic – n/a <sup>3</sup>	Fungi / <i>Ascomycota</i>	C <sub>11</sub> H <sub>18</sub> O <sub>5</sub>	230	
4	(4S,7R,10R,E)-4,7-dihydroxy-10-methyl-3,4,7,8,9,10-hexahydro-2H-oxecin-2-one	<i>Cordyceps militaris</i> BCC 2816 <sup>3</sup>	Antiparasitic – n/a <sup>3</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>4</sub>	200	
5	(5S,8S,9S,10R,E)-10-heptyl-5,8,9-trihydroxy-3,4,5,8,9,10-hexahydro-2H-oxecin-2-one	<i>Xylaria feejeensis</i> MG871188 <sup>4</sup>	Osteoclastogenesis inhibitory – a <sup>4</sup>	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>28</sub> O <sub>5</sub>	300	
6	(5Z,9S)-tetradec-5-en-9-olide	<i>Silvestritermes minutus</i> <sup>5</sup>	Behavior test – n/a <sup>5</sup>	Animalia / <i>Insecta</i>	C <sub>14</sub> H <sub>24</sub> O <sub>2</sub>	224	
7	(6S,7R,9R)-6,7-dihydroxy-	<i>Phomopsis</i> sp.	Plant growth inhibition –	Fungi /	C <sub>12</sub> H <sub>20</sub> O <sub>4</sub>	228	

	9-propylnon-4-eno-9-lactone	HCCB03520 <sup>6</sup>	a <sup>6</sup>	<i>Ascomycota</i>		
8	(R)-2,4-Dihydroxy-7-methyl-7,8,9,10,11,12-hexahydro-6-oxa-benzocyclodecen-5-one	<i>Chaetosphaeronema hispidulur</i> TS-8-1 <sup>7</sup>	Cytotoxic – a <sup>7</sup> Plant growth inhibition – a <sup>7</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>18</sub> O <sub>4</sub>	250
9	18-deoxynargenicin A1 (antibiotic 367c)	<i>Saccharopolyspora hirsute</i> 367 (UC® 8106, NRRL 10245) <sup>8</sup>	Antibacterial – a <sup>8</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>28</sub> H <sub>37</sub> NO <sub>7</sub>	499
10	18-deoxynodusmicin A1 (U-61,732)	<i>Saccharopolyspora hirsuta</i> 367, NRRL 12045 <sup>9</sup>	Antibacterial – a <sup>9</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>28</sub> H <sub>37</sub> NO <sub>7</sub>	499
11	2-epi-herbarumin II	<i>Didymella pinodes</i> CO-99 <sup>10</sup> <i>Phoma bellidis</i> HGX2 <sup>11</sup> <i>Pestalotiopsis clavispora</i> <sup>12</sup> <i>Paraphaeosphaeria recurvifoliae</i> EML-PL001 <sup>13</sup>	Cytotoxic – n/a <sup>11, 12</sup> Enzyme inhibitory – a <sup>13</sup> Phytotoxic activity – n/a <sup>10</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>5</sub>	244
12	3,4-deoxy-3,4-didehydromultiplolide A	<i>Phomopsis</i> sp. NXZ-05 <sup>14</sup>	Antifungal – n/a <sup>14</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
13	3R,5R-sonnerlactone (2R,4R-sonnerlactone)	Endophytic fungus Zh6-B1 <sup>15</sup> <i>Chaetosphaeronema hispidulum</i> TS-8-1 <sup>16</sup>	Antiproliferative – a <sup>15</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>18</sub> O <sub>5</sub>	266
14	3R,5S-sonnerlactone (2R,4S-sonnerlactone)	Endophytic fungus Zh6-B1 <sup>15</sup> <i>Chaetosphaeronema hispidulum</i> TS-8-1 <sup>16</sup>	Antiproliferative – a <sup>15</sup> Cytotoxic – a <sup>16</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>18</sub> O <sub>5</sub>	266
15	5,6-dihydro-5,6-epoxymultiplolide A	<i>Phomopsis</i> sp. NXZ-05 <sup>14</sup>	Antifungal – n/a <sup>14</sup> Cytotoxic – n/a <sup>14</sup> Enzyme inhibitory – n/a <sup>14</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>6</sub>	230

<b>16</b>	5,6-dihydropinolidoxin	<i>Ascochyta pinodes</i> ITEM 1094 <sup>17</sup> <i>Didymella pinodes</i> CO-99 <sup>10</sup>	Antifungal – n/a <sup>17</sup> Mycotoxic – n/a <sup>17</sup> Phytotoxic – a <sup>17</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>28</sub> O <sub>6</sub>	340
<b>17</b>	5,6-epoxypinolidoxin	<i>Ascochyta pinodes</i> ITEM 1094 <sup>17</sup> <i>Didymella pinodes</i> CO-99 <sup>10</sup>	Antifungal – n/a <sup>17</sup> Cytotoxic – n/a <sup>11</sup> Mycotoxic – n/a <sup>17</sup> Phytotoxic – n/a <sup>17</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>26</sub> O <sub>7</sub>	354
<b>18</b>	7-epi-pinolidoxin	<i>Ascochyta pinodes</i> ITEM 1094 <sup>17</sup> <i>Didymella pinodes</i> CO-99 <sup>10</sup>	Antifungal – n/a <sup>17</sup> Mycotoxic – n/a <sup>17</sup> Phytotoxic – a <sup>17</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>26</sub> O <sub>6</sub>	338
<b>19</b>	7-O-acetylmultiplolide A (7α-acetoxymultiplolide A)	<i>Pseudorhizophila mangelotii</i> gen. et comb. nov. CBS 419.67 <sup>18</sup> <i>Phomopsis</i> sp. YM 311483 <sup>19</sup>	Antibacterial – n/a <sup>18</sup> Antifungal – a <sup>19</sup> , n/a <sup>18</sup> Cytotoxic – n/a <sup>18</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>16</sub> O <sub>6</sub>	256
<b>20</b>	7α,8α-dihydroxy-3,5- decadien-10-olide	<i>Phomopsis</i> sp. YM 311483 <sup>19</sup>	Antifungal – a <sup>19</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
<b>21</b>	8-O-acetyl-5,6-dihydro- 5,6-epoxy-multiplolide A	<i>Phomopsis</i> sp. NXZ- 05 <sup>14</sup>	Antifungal – n/a <sup>14</sup> Cytotoxic – n/a <sup>14</sup> Enzyme inhibitory – n/a <sup>14</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>16</sub> O <sub>7</sub>	272
<b>22</b>	8-O-acetylmultiplolide A (8α-acetoxymultiplolide A)	<i>Pseudorhizophila mangelotii</i> gen. et comb. nov. CBS 419.67 <sup>18</sup> <i>Phomopsis</i> sp. YM 311483 <sup>19</sup> <i>Phomopsis</i> sp. NXZ- 05 <sup>14</sup>	Antibacterial – n/a <sup>18</sup> Antifungal – a <sup>19</sup> , n/a <sup>18</sup> Cytotoxic – n/a <sup>18</sup> Enzyme inhibitory – a <sup>14</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>16</sub> O <sub>6</sub>	256
<b>23</b>	8α-acetoxy-5α-hydroxy-7- oxodecan-10-olide	<i>Phomopsis</i> sp. YM 311483 <sup>19</sup>	Antifungal – a <sup>19</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>18</sub> O <sub>6</sub>	258
<b>24</b>	Achaetolide	<i>Achaetomium cristalliferum</i> PC	Not tested	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>28</sub> O <sub>5</sub>	300

		3252 <sup>20</sup> <i>Achaetomium strumarium</i> IMI 82624 <sup>6</sup> <i>Ophiobolus</i> sp. <sup>21</sup>					
25	Achaetolide-II	<i>Helminthosporium velutinum</i> TS28 <sup>22</sup>	Antifungal – a <sup>22</sup> Cytotoxic – a <sup>22</sup> Phytotoxic – a <sup>22</sup>	Fungi / <i>Ascomycota</i>	C <sub>21</sub> H <sub>36</sub> O <sub>7</sub>	400	
26	Aldaulactone	<i>Alternaria dauci</i> <sup>23, 24</sup>	Cytotoxic – a <sup>23</sup> Phytotoxic - a <sup>24</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>17</sub> O <sub>6</sub>	292	
27	Ascidiatrienolide A	<i>Didemnum candidum</i> <sup>25, 26</sup>	Not tested	Animalia / <i>Ascidiacea</i>	C <sub>20</sub> H <sub>30</sub> O <sub>3</sub>	318	Was first described as a nine-membered lactone, then was revised as a ten-membered one
28	Ascidiatrienolide B	<i>Didemnum candidum</i> <sup>25</sup>	Not tested	Animalia / <i>Ascidiacea</i>	C <sub>20</sub> H <sub>30</sub> O <sub>3</sub>	320	Probably needs the structural revision
29	Ascidiatrienolide C	<i>Didemnum candidum</i> <sup>25</sup>	Not tested	Animalia / <i>Ascidiacea</i>	C <sub>20</sub> H <sub>30</sub> O <sub>3</sub>	320	Probably needs the structural revision
30	Aspinolide A	<i>Aspergillus ochraceus</i> DSM-7428 <sup>27</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>3</sub>	184	
31	Aspinolide B	<i>Aspergillus ochraceus</i> DSM-7428 <sup>27</sup> <i>Trichoderma arundinaceum</i> IBT 40837 <sup>28, 29</sup>	Antifungal – n/a <sup>28</sup> Plant growth promotion – a <sup>28</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>20</sub> O <sub>6</sub>	284	
32	Aspinolide C	<i>Aspergillus ochraceus</i> DSM-7428 <sup>27</sup> <i>Trichoderma arundinaceum</i> IBT 40837 <sup>28, 29</sup>	Antifungal – a <sup>28</sup> Plant growth inhibition – a <sup>28</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>18</sub> O <sub>6</sub>	282	
33	Aspinolide D	<i>Trichoderma</i>	Not tested	Fungi /	C <sub>14</sub> H <sub>20</sub> O <sub>5</sub>	268	

		<i>arundinaceum</i> IBT 40837 <sup>28</sup>		<i>Ascomycota</i>		
<b>34</b>	Aspinolide E	<i>Trichoderma arundinaceum</i> IBT 40837 <sup>28</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>22</sub> O <sub>6</sub>	286
<b>35</b>	Aspinolide F	<i>Trichoderma arundinaceum</i> IBT 40837 <sup>28</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>22</sub> O <sub>8</sub>	342
<b>36</b>	Aspinolide G	<i>Trichoderma arundinaceum</i> IBT 40837 <sup>28</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>22</sub> O <sub>7</sub>	314
<b>37</b>	Bellidisin B	<i>Phoma bellidis</i> HGX2 <sup>11</sup>	Cytotoxic – n/a <sup>11</sup>	Fungi / <i>Ascomycota</i>	C <sub>20</sub> H <sub>28</sub> O <sub>7</sub>	380
<b>38</b>	Bellidisin C	<i>Phoma bellidis</i> HGX2 <sup>11</sup>	Cytotoxic – n/a <sup>11</sup>	Fungi / <i>Ascomycota</i>	C <sub>20</sub> H <sub>30</sub> O <sub>6</sub>	366
<b>39</b>	Bellidisin D	<i>Phoma bellidis</i> HGX2 <sup>11</sup>	Cytotoxic – a <sup>11</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>26</sub> O <sub>7</sub>	354
<b>40</b>	Botryolide A	<i>Botryotrichum</i> sp. NRRL 38180 ( <i>Chaetomium piluliferum</i> ) <sup>30</sup>	Antibacterial – n/a <sup>30</sup> Antifungal – n/a <sup>30</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>5</sub>	214
<b>41</b>	Botryolide B	<i>Botryotrichum</i> sp. NRRL 38180 ( <i>Chaetomium piluliferum</i> ) <sup>30</sup>	Antibacterial – n/a <sup>30</sup> Antifungal – n/a <sup>30</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
<b>42</b>	Botryolide C	<i>Botryotrichum</i> sp. NRRL 38180 ( <i>Chaetomium piluliferum</i> ) <sup>30</sup>	Antibacterial – n/a <sup>30</sup> Antifungal – n/a <sup>30</sup>	Fungi / <i>Ascomycota</i>	C <sub>13</sub> H <sub>16</sub> O <sub>6</sub>	268
<b>43</b>	Botryolide D	<i>Botryotrichum</i> sp. NRRL 38180 ( <i>Chaetomium piluliferum</i> ) <sup>30</sup>	Antibacterial – n/a <sup>30</sup> Antifungal – n/a <sup>30</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216
<b>44</b>	Cephalosporolide B	<i>Cephalosporium aphidicola</i> ACC 3490 <sup>31</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198

45	Cephalosporolide C = Bassianolone = Cephalosporolide J	<i>Cephalosporium aphidicola</i> ACC 3490 <sup>31</sup> <i>Cordyceps militaris</i> BCC 2816 <sup>3</sup> <i>Beauveria bassiana</i> <sup>32</sup> <i>Isaria fumosorosea</i> ACCC 37775 <sup>33</sup> <i>Armillaria tabescens</i> JNB-OZ344 <sup>34</sup>	Antiparasitic – n/a <sup>3</sup> Antibacterial – a <sup>32</sup> , n/a <sup>34</sup> Antifungal – a <sup>32</sup> , n/a <sup>34</sup> Enzyme inhibitory – n/a <sup>33</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216	The identity has been confirmed by Song et al., 2014 <sup>35</sup>
46	Cephalosporolide G	<i>Cephalosporium aphidicola</i> IMI 68689 <sup>31</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216	
47	Cétolactone (Jasmine ketolactone)	<i>Jasminum grandiflorum</i> L. <sup>36</sup>	Not tested	Plantae / <i>Lamiales</i>	C <sub>12</sub> H <sub>16</sub> O <sub>3</sub>	208	
48	Colletofragarone A1	<i>Colletotrichum fragariae</i> <sup>37</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>26</sub> O <sub>6</sub>	386	
49	Colletofragarone A2	<i>Colletotrichum fragariae</i> <sup>37</sup> <i>Colletotrichum</i> sp. 13S020 <sup>38</sup>	Cytotoxic – a <sup>38</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>26</sub> O <sub>6</sub>	386	
50	Colletoin A	<i>Colletotrichum</i> sp. 13S020 <sup>38</sup>	Cytotoxic – a <sup>38</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>26</sub> O <sub>4</sub>	354	
51	Colletoin B	<i>Colletotrichum</i> sp. 13S020 <sup>38</sup>	Cytotoxic – a <sup>38</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>28</sub> O <sub>6</sub>	404	
52	Colletoin C	<i>Colletotrichum</i> sp. 13S020 <sup>38</sup>	Cytotoxic – a <sup>38</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>28</sub> O <sub>7</sub>	404	
53	Colletotrichalactone C - Ca	<i>Colletotrichum</i> sp. JS- 0361 <sup>39</sup>	Cytotoxic – a <sup>39</sup>	Fungi / <i>Ascomycota</i>	C <sub>21</sub> H <sub>28</sub> O <sub>8</sub>	408	
54	Colletotrichalactone A - Aa	<i>Colletotrichum</i> sp. JS- 0361 <sup>39</sup>	Cytotoxic – a <sup>39</sup>	Fungi / <i>Ascomycota</i>	C <sub>20</sub> H <sub>20</sub> O <sub>6</sub>	356	
55	Colletotrichalactone B	<i>Colletotrichum</i> sp. JS- 0361 <sup>39</sup>	Cytotoxic – a <sup>39</sup>	Fungi / <i>Ascomycota</i>	C <sub>21</sub> H <sub>24</sub> O <sub>7</sub>	388	
56	Colletotriolide	<i>Colletotrichum</i> sp. <sup>40</sup>	Antibacterial – a <sup>40</sup> Cytotoxic – n/a <sup>40</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>32</sub> O <sub>5</sub>	328	
57	Coloradocin = Luminamicin	<i>Nocardioides</i> OMR- 59 <sup>41</sup>	Antibacterial – a <sup>41</sup> , <sup>43</sup> Acute toxicity - n/a <sup>41</sup> , <sup>43</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>32</sub> H <sub>38</sub> O <sub>12</sub>	614	Coloradocin is related to a small

		<i>Actinoplanes coloradoensis</i> <sup>42</sup>					class of antibiotics which include nodusmicin and nargenicin and was shown to be identical to luminamicin for which no structure has been reported.
58	Cremonolide	<i>Trichoderma cremeum</i> 506 <sup>44</sup>	Antifungal – a <sup>44</sup> Plant growth promotion – a <sup>44</sup>	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>22</sub> O <sub>7</sub>	326	
59	Curvulalide	<i>Curvularia</i> sp. PSU-F22 <sup>45</sup>	Antibacterial – n/a <sup>45</sup> Antifungal – n/a <sup>45</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>5</sub>	214	
60	Curvulide A	<i>Curvularia</i> sp. 768 <sup>1</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198	
61	Curvulide B1 = Stagonolide H (or enantiomers)	<i>Curvularia</i> sp. 768 <sup>1</sup> <i>Roussoella siamensis</i> SYSU-MS4723 <sup>2</sup> <i>Stagonospora cirsii</i> C-163 <sup>46</sup>	Antialgal – n/a <sup>1</sup> Antibacterial – n/a <sup>1</sup> Antifungal – n/a <sup>1</sup> Anti-inflammatory – n/a <sup>2</sup> Antioxidant capacity – n/a <sup>2</sup> Phytotoxic – a <sup>46</sup> Plant growth inhibition – a <sup>46</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>12</sub> O <sub>4</sub>	196	Greve et al., 2008 <sup>1</sup> described the absolute configuration of epimeric curvulides B1/B2. The relative configuration is described for stagonolide H. <sup>46</sup>
62	Curvulide B2	<i>Curvularia</i> sp. 768 <sup>1</sup> <i>Roussoella siamensis</i> SYSU-MS4723 <sup>2</sup>	Antialgal – n/a <sup>1</sup> Antibacterial – n/a <sup>1</sup> Antifungal – n/a <sup>1</sup> Anti-inflammatory – n/a <sup>2</sup> Antioxidant capacity – n/a <sup>2</sup> Cytotoxic – n/a <sup>2</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>12</sub> O <sub>4</sub>	196	
63	Cytospolide A	<i>Cytospora</i> sp. ZW02 <sup>47</sup>	Cytotoxic – a <sup>47</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>5</sub>	312	C-2 methyl group in lactone core
64	Cytospolide B	<i>Cytospora</i> sp. ZW02 <sup>47</sup>	Cytotoxic – a <sup>47</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>5</sub>	312	C-2 methyl group in lactone core

65	Cytospolide C	<i>Cytospora</i> sp. ZW02 <sup>47</sup>	Cytotoxic – a <sup>47</sup>	Fungi / <i>Ascomycota</i>	C <sub>19</sub> H <sub>30</sub> O <sub>6</sub>	354	C-2 methyl group in lactone core
66	Cytospolide D	<i>Cytospora</i> sp. ZW02 <sup>47</sup>	Cytotoxic – a <sup>47</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>26</sub> O <sub>4</sub>	270	C-2 methyl group in lactone core
67	Cytospolide E	<i>Cytospora</i> sp. ZW02 <sup>47</sup>	Cytotoxic – a <sup>47</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>26</sub> O <sub>4</sub>	270	C-2 methyl group in lactone core
68	Cytospolide F	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>26</sub> O <sub>5</sub>	286	C-2 methyl group in lactone core
69	Cytospolide G	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>6</sub>	328	C-2 methyl group in lactone core
70	Cytospolide H	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>19</sub> H <sub>30</sub> O <sub>7</sub>	370	C-2 methyl group in lactone core
71	Cytospolide I	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>6</sub>	328	C-2 methyl group in lactone core
72	Cytospolide J	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>6</sub>	328	C-2 methyl group in lactone core
73	Cytospolide K	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>26</sub> O <sub>4</sub>	270	C-2 methyl group in lactone core
74	Cytospolide L	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>5</sub>	312	C-2 methyl group in lactone core
75	Cytospolide M	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>26</sub> O <sub>5</sub>	286	C-2 methyl group in lactone core
76	Cytospolide N	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>7</sub>	344	C-2 methyl group in lactone core
77	Cytospolide O	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>24</sub> O <sub>4</sub>	268	C-2 methyl group in lactone core
78	Cytospolide P	<i>Cytospora</i> sp. ZW02 <sup>48</sup>	Cytotoxic – a <sup>48</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>28</sub> O <sub>6</sub>	328	C-2 methyl group in lactone core
79	Decarestrictine A1/A2	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>49, 50</sup> <i>Penicillium</i> <i>corylophilum</i> FH-A 6360 <sup>49, 50</sup>	Antibacterial – n/a <sup>49</sup> Antifungal – n/a <sup>49</sup> Antiprotozoal – n/a <sup>49</sup> Antiviral – n/a <sup>49</sup> Cholesterol biosynthesis inhibition – a <sup>49</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198	
80	Decarestrictine B	<i>Penicillium</i>	Antibacterial – n/a <sup>49</sup>	Fungi /	C <sub>10</sub> H <sub>14</sub> O <sub>5</sub>	214	

		<i>simplicissimum</i> FH-A 6090 <sup>49, 50</sup> <i>Penicillium</i> <i>corylophilum</i> FH-A 6360 <sup>49, 50</sup> <i>Pseudopestalotiopsis</i> sp. PSU-AMF45 <sup>51</sup>	Antifungal – n/a <sup>49</sup> Antiprotozoal – n/a <sup>49</sup> Antiviral – n/a <sup>49</sup> Cholesterol biosynthesis inhibition – a <sup>49</sup>	<i>Ascomycota</i>		
<b>81</b>	Decarestrictine C1/C2	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>49, 50</sup> <i>Armillaria tabescens</i> JNB-OZ344 <sup>34</sup>	Antibacterial – n/a <sup>49</sup> Antifungal – n/a <sup>49</sup> Antiprotozoal – n/a <sup>49</sup> Antiviral – n/a <sup>49</sup> Cholesterol biosynthesis inhibition – a <sup>49</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>4</sub>	200
<b>82</b>	Decarestrictine E	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>52</sup>	Cholesterol biosynthesis inhibition – n/a <sup>52</sup>	Fungi / <i>Ascomycota</i>	C <sub>11</sub> H <sub>16</sub> O <sub>5</sub>	228
<b>83</b>	Decarestrictine F	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>52</sup>	Cholesterol biosynthesis inhibition – n/a <sup>52</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>12</sub> O <sub>4</sub>	196
<b>84</b>	Decarestrictine G	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>52</sup>	Cholesterol biosynthesis inhibition – n/a <sup>52</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216
<b>85</b>	Decarestrictine H	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>52</sup>	Cholesterol biosynthesis inhibition – n/a <sup>52</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
<b>86</b>	Decarestrictine I	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>52</sup>	Cholesterol biosynthesis inhibition – n/a <sup>52</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
<b>87</b>	Decarestrictine J	<i>Penicillium</i> <i>simplicissimum</i> FH-A 6090 <sup>52</sup> <i>Pseudoxanthomonas</i> <i>japonensis</i> ZKB-2 <sup>53</sup>	Cholesterol biosynthesis inhibition – n/a <sup>52</sup>	Fungi / <i>Ascomycota</i> Bacteria / <i>Gammaproteobacteria</i>	C <sub>10</sub> H <sub>16</sub> O <sub>4</sub>	200
<b>88</b>	Decarestrictine K	<i>Penicillium</i> <i>simplicissimum</i> FH-A	Cholesterol biosynthesis inhibition – n/a <sup>52</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198

		6090 <sup>52</sup>				
<b>89</b>	Decarestrictine N	<i>Penicillium simplicissimum</i> FH-A 6090 <sup>54</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216
<b>90</b>	Decarestrictine O	<i>Penicillium simplicissimum</i> FH-A 6090 <sup>54</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216
<b>91</b>	Decarestrictine Q	<i>Pseudopestalotiopsis</i> sp. PSU-AMF45 <sup>51</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>5</sub>	214
<b>92</b>	Diaportheolide A	<i>Diaporthe</i> sp. SXZ-19 <sup>55</sup>	Antibacterial – a <sup>55</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>24</sub> O <sub>5</sub>	272
<b>93</b>	Diaportheolide B	<i>Diaporthe</i> sp. SXZ-19 <sup>55</sup>	Antibacterial – a <sup>55</sup>	Fungi / <i>Ascomycota</i>	C <sub>17</sub> H <sub>31</sub> O <sub>6</sub>	330
<b>94</b>	Diaporthsin A	<i>Diaporthe</i> sp. JC-J7 <sup>56</sup>	Antihyperlipidemic – n/a <sup>56</sup> Cytotoxic – a <sup>56</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>3</sub>	184
<b>95</b>	Diaporthsin F	<i>Diaporthe</i> sp. JC-J7 <sup>56</sup>	Antihyperlipidemic – n/a <sup>56</sup> Cytotoxic – a <sup>56</sup>	Fungi / <i>Ascomycota</i>	C <sub>13</sub> H <sub>20</sub> O <sub>6</sub>	272
<b>96</b>	Diaporthsin H	<i>Diaporthe</i> sp. JC-J7 <sup>56</sup>	Antihyperlipidemic – n/a <sup>56</sup> Cytotoxic – a <sup>56</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216
<b>97</b>	Dictyosphaeric acid A	<i>Penicillium</i> sp. F01V25 <sup>57</sup>	Antibacterial – a <sup>57</sup> Antifungal – a <sup>57</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>24</sub> O <sub>8</sub>	416
<b>98</b>	Dictyosphaeric acid B	<i>Penicillium</i> sp. F01V25 <sup>57</sup>	Antibacterial – n/a <sup>57</sup> Antifungal – n/a <sup>57</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>26</sub> O <sub>9</sub>	434
<b>99</b>	Didemnilactone A	<i>Didemnum moseleyi</i> <sup>58, 59</sup>	Enzyme inhibitory – a <sup>107</sup> Binding activity to leukotriene B <sub>4</sub> receptors – a <sup>58</sup>	Animalia / <i>Ascidacea</i>	C <sub>20</sub> H <sub>28</sub> O <sub>3</sub>	316
<b>100</b>	Didemnilactone B	<i>Didemnum moseleyi</i> <sup>107</sup>	Enzyme inhibitory – a <sup>107</sup>	Animalia / <i>Ascidacea</i>	C <sub>20</sub> H <sub>28</sub> O <sub>3</sub>	316
<b>101</b>	Diplodialide A	<i>Diplodia pinea</i> IF0 6472 <sup>60, 61</sup>	Enzyme inhibitory – a <sup>60, 61</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>3</sub>	182
<b>102</b>	Diplodialide B	<i>Diplodia pinea</i> IF0 6472 <sup>61</sup> <i>Cephalosporium aphidicola</i> IMI	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>3</sub>	184

		68689 <sup>62</sup>				
103	Diplodialide C	<i>Diplodia pinea</i> IF0 6472 <sup>61</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>18</sub> O <sub>3</sub>	186
104	Diplodialide D	<i>Diplodia pinea</i> IF0 6472 <sup>61, 63</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>4</sub>	200
105	Fusanolide A	<i>Fusarium</i> sp. <sup>64</sup>	Plant growth inhibition – a <sup>64</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>2</sub>	166
106	Fusanolide B	<i>Fusarium</i> sp. <sup>64</sup>	Plant growth inhibition – n/a <sup>64</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
107	Glabramycin A	<i>Neosartorya glabra</i> MF7030 and F-155,700 <sup>65</sup>	Antibacterial – a <sup>65</sup> Antifungal – a <sup>65</sup> Inhibition of RNA synthesis – a <sup>65</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>24</sub> O <sub>6</sub>	384
108	Glabramycin B	<i>Neosartorya glabra</i> MF7030 and F-155,700 <sup>65</sup>	Antibacterial – a <sup>65</sup> Antifungal – a <sup>65</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>26</sub> O <sub>6</sub>	386
109	Glabramycin C	<i>Neosartorya glabra</i> MF7030 and F-155,700 <sup>65</sup>	Antibacterial – a <sup>65</sup> Antifungal – a <sup>65</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>24</sub> O <sub>6</sub>	384
110	Herbarumin I	<i>Phoma herbarum</i> <sup>66</sup> <i>Stagonospora cirsii</i> S-47 <sup>67</sup>	Antialgal – n/a <sup>68</sup> Antibacterial – n/a <sup>67, 68</sup> Antifungal – n/a <sup>67</sup> Binding activity to bovine brain-calmodulin – a <sup>69</sup> Cytotoxic – a <sup>67</sup> / n/a <sup>70</sup> Enzyme inhibitory – a <sup>69</sup> Herbicidal activity – a <sup>70</sup> Insecticidal – a <sup>67</sup> Mycotoxic/Zootoxic – n/a <sup>67</sup> Plant growth inhibition – a <sup>66, 68</sup> Phytotoxic – a <sup>67, 68</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>4</sub>	228
111	Herbarumin II	<i>Phoma herbarum</i> <sup>66</sup> <i>Didymella pinodes</i>	Binding activity to bovine brain-calmodulin – a <sup>69</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>5</sub>	244

		CO-99 <sup>10</sup> <i>Paraphaeosphaeria recurvifoliae</i> EML-PL001 <sup>13</sup>	Plant growth inhibition – a <sup>66</sup> Phytotoxic – n/a <sup>10</sup> Enzyme inhibitory – a <sup>13</sup>			
112	Herbarumin III	<i>Phoma herbarum</i> <sup>69</sup>	Binding activity to bovine brain-calmodulin – a <sup>69</sup> Plant growth inhibition – a <sup>69</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>3</sub>	212
113	Hispidulactone A	<i>Chaetosphaeronema hispidulum</i> TS-8-1 <sup>7</sup>	Cytotoxic – n/a <sup>7</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>20</sub> O <sub>4</sub>	264
114	Hispidulactone B	<i>Chaetosphaeronema hispidulum</i> TS-8-1 <sup>7, 16</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>18</sub> O <sub>5</sub>	266
115	Hispidulactone C	<i>Chaetosphaeronema hispidulum</i> TS-8-1 <sup>7</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>20</sub> O <sub>5</sub>	280
116	Hispidulactone F	<i>Chaetosphaeronema hispidulum</i> TS-8-1 <sup>16</sup>	Cytotoxic – a <sup>16</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>20</sub> O <sub>5</sub>	280
117	Humicolactone	<i>Gilmaniella humicola</i> CBS 220.65 <sup>71</sup>	Antibacterial – a <sup>71</sup> Antifungal – a <sup>71</sup> Cytotoxic – a <sup>71</sup> Nematicidal – n/a <sup>71</sup> Plant growth inhibition – a <sup>71</sup> Plant growth promotion – n/a <sup>71</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>12</sub> O <sub>5</sub>	212
118	Hypocreolide A	<i>Hypocrea lactea</i> IBWF 02002 <sup>72</sup>	Antibacterial – a <sup>72</sup> Antifungal – a <sup>72</sup> Cytotoxic – a <sup>72</sup> Plant growth inhibition – n/a <sup>72</sup> Phytotoxic – a <sup>72</sup>	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>28</sub> O <sub>3</sub>	268
119	Hypoxylyde	<i>Annulohypoxyylon</i> sp. <sup>73</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>20</sub> H <sub>22</sub> O <sub>8</sub>	390
120	Lithocarpin A	<i>Phomopsis lithocarpus</i> FS508 <sup>74</sup>	Cytotoxic – a <sup>74</sup>	Fungi / <i>Ascomycota</i>	C <sub>37</sub> H <sub>42</sub> O <sub>11</sub>	662

121	Lithocarpin B	<i>Phomopsis lithocarpus</i> FS508 <sup>74</sup>	Cytotoxic – a <sup>74</sup>	Fungi / <i>Ascomycota</i>	C <sub>35</sub> H <sub>40</sub> O <sub>10</sub>	620	
122	Lithocarpin C	<i>Phomopsis lithocarpus</i> FS508 <sup>74</sup>	Cytotoxic – a <sup>74</sup>	Fungi / <i>Ascomycota</i>	C <sub>35</sub> H <sub>42</sub> O <sub>9</sub>	606	
123	Lithocarpin D	<i>Phomopsis lithocarpus</i> FS508 <sup>74</sup>	Cytotoxic – a <sup>74</sup>	Fungi / <i>Ascomycota</i>	C <sub>37</sub> H <sub>42</sub> O <sub>11</sub>	662	
124	Luteolide	<i>Gephyromantis luteus</i> <sup>75</sup> <i>Mantidactylus betsileanus</i> <sup>75</sup> <i>Gephyromantis moseri</i> <sup>75, 76</sup>	Not tested	Animalia / Amphibia	C <sub>13</sub> H <sub>24</sub> O <sub>2</sub>	212	The compound C in <i>G. moseri</i> <sup>76</sup> was later identified as luteolide in Melnik et al., 2019 <sup>75</sup>
125	Mangiferaelactone	<i>Pestalotiopsis mangiferae</i> <sup>77</sup>	Antibacterial – a <sup>77</sup> Antiparasitic – n/a <sup>77</sup> Cytotoxic – n/a <sup>77</sup>	Fungi / <i>Ascomycota</i>	C <sub>20</sub> H <sub>32</sub> O <sub>8</sub>	400	
126	Mantidactolide A	<i>Mantidactylus femoralis</i> <sup>78</sup>	Not tested	Animalia / Amphibia	C <sub>11</sub> H <sub>20</sub> O <sub>2</sub>	184	
127	Mantidactolide B	<i>Mantidactylus femoralis</i> <sup>78</sup>	Not tested	Animalia / Amphibia	C <sub>11</sub> H <sub>20</sub> O <sub>2</sub>	184	
128	Microcarpalide	Unidentified fungus <sup>79</sup>	Antimicrofilament – a <sup>79</sup> Cytotoxic – a <sup>79</sup>	Fungi	C <sub>16</sub> H <sub>28</sub> O <sub>5</sub>	300	
129	Modiolide A	<i>Curvularia</i> sp. PSU-F22 <sup>45</sup> <i>Curvularia</i> sp. M12 <sup>80</sup> <i>Paraphaeosphaeria</i> sp. N119 <sup>81</sup> <i>Stagonospora cirsii</i> C-163 <sup>46</sup> <i>Microsphaeropsis arundinis</i> <sup>82</sup> <i>Paraconiothyrium</i> sp. VK-13 <sup>83, 84</sup> <i>Periconia siamensis</i>	Antibacterial – a <sup>81, 85</sup> Antifungal – a <sup>81</sup> , n/a <sup>45</sup> Anti-inflammatory – n/a <sup>83</sup> Antioxidant capacity – n/a <sup>2</sup> Cytotoxic – a <sup>82</sup> Motility inhibitory – a <sup>80</sup> Phytotoxic – a <sup>80</sup> Plant growth inhibition – n/a <sup>46</sup> Zoosporicidal – a <sup>80</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198	

		CMUGE015 <sup>85, 86</sup> <i>Roussoella siamensis</i> SYSU-MS4723 <sup>2</sup>				
130	Modiolide B	<i>Curvularia</i> sp. PSU-F22 <sup>45</sup> <i>Paraphaeosphaeria</i> sp. N119 <sup>81</sup> <i>Paraconiothyrium</i> sp. VK-13 <sup>83, 84</sup>	Antibacterial – n/a <sup>45, 81</sup> Antifungal – a <sup>81</sup> , n/a <sup>45</sup> Anti-inflammatory – n/a <sup>83</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>3</sub>	182
131	Modiolide D	<i>Microsphaeropsis arundinis</i> <sup>82</sup> <i>Paraconiothyrium</i> sp. VK-13 <sup>83</sup>	Anti-inflammatory – n/a <sup>83</sup> Cytotoxic – a <sup>82</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>16</sub> O <sub>5</sub>	240
132	Modiolide E	<i>Microsphaeropsis arundinis</i> <sup>82</sup> <i>Paraconiothyrium</i> sp. VK-13 <sup>83</sup>	Anti-inflammatory – n/a <sup>83</sup> Cytotoxic – a <sup>82</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>16</sub> O <sub>5</sub>	240
133	Modiolide F	<i>Paraconiothyrium</i> sp. VK-13 <sup>83</sup>	Anti-inflammatory – n/a <sup>83</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>16</sub> O <sub>5</sub>	240
134	Modiolide G	<i>Paraconiothyrium</i> sp. VK-13 <sup>83</sup>	Anti-inflammatory – n/a <sup>83</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
135	Mueggelone = Gloeolactone	<i>Aphanizomenon flos-aquae</i> <sup>87</sup> <i>Gloeotrichia</i> sp. <sup>88</sup>	Antialgal – n/a <sup>87</sup> Antibacterial – n/a <sup>87, 88</sup> Anti-fish embryo larval development test – a <sup>87</sup> Antifungal – n/a <sup>87</sup> Enzyme inhibitory – n/a <sup>87</sup> Mycotoxic/Zootoxic – a <sup>88</sup>	Bacteria / <i>Cyanophyceae</i>	C <sub>18</sub> H <sub>28</sub> O <sub>3</sub>	292 Two natural products have the same structures. Their identity was noted by Tidgewel et al., 2010 <sup>89</sup> and Sun et al., 2012 <sup>90</sup>
136	Multiplolide A	<i>Xylaria multiplex</i> BCC 1111 <sup>91</sup> <i>Phomopsis</i> sp. YM 311483 <sup>19</sup>	Antifungal – a <sup>19, 91</sup> , n/a <sup>14</sup> Antiparasitic – n/a <sup>91</sup> Cytotoxic – n/a <sup>14</sup> Enzyme inhibitory – n/a <sup>91</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>5</sub>	214

		<i>Phomopsis</i> sp. NXZ-05 <sup>14</sup>				
137	Multiplolide B	<i>Xylaria multiplex</i> BCC 1111 <sup>91</sup>	Antifungal – a <sup>91</sup> Antiparasitic – n/a <sup>91</sup> Enzyme inhibitory – n/a <sup>91</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>18</sub> O <sub>6</sub>	282
138	Nargenicin A1 (CP-47,444, CS-682)	<i>Nocardia argentinensis</i> ATCC 31306 <sup>92, 93</sup> <i>Nocardia</i> sp. CS682 <sup>94</sup>	Antibacterial – a <sup>92, 94</sup> Anti-oxidation – a <sup>94</sup> Cytotoxic – n/a <sup>94</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>28</sub> H <sub>37</sub> NO <sub>8</sub>	515
139	Nargenicin B1 (CP 51467)	<i>Nocardia argentinensis</i> ATCC 31438 <sup>95</sup>	Antibacterial – a <sup>95</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>29</sub> H <sub>39</sub> NO <sub>10</sub>	561
140	Nargenicin B2	<i>Nocardia</i> sp. <sup>96</sup>	Antibacterial – a <sup>96</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>28</sub> H <sub>37</sub> NO <sub>9</sub>	531
141	Nargenicin B3	<i>Nocardia</i> sp. <sup>96</sup>	Antibacterial – a <sup>96</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>28</sub> H <sub>37</sub> NO <sub>9</sub>	531
142	Nargenicin C1 (CP-57820)	<i>Nocardia</i> sp. N467-32 <sup>96, 97</sup>	Antibacterial – a <sup>96, 97</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>30</sub> H <sub>41</sub> NO <sub>10</sub>	575
143	Neo-debromoaplysiatoxin C	<i>Lyngbya</i> sp. <sup>98</sup>	Cytotoxic – n/a <sup>98</sup>	Bacteria / Cyanophyceae	C <sub>32</sub> H <sub>44</sub> O <sub>9</sub>	572
144	Neodidemnilactone	<i>Didemnum moseleyi</i> <sup>58, 59</sup>	Binding activity to leukotriene B <sub>4</sub> receptors – a <sup>59</sup>	Animalia / <i>Ascidacea</i>	C <sub>20</sub> H <sub>30</sub> O <sub>3</sub>	318
145	Nodusmicin	<i>Saccharopolyspora hirsuta</i> 367 (UC® 8106, NRRL 10245) <sup>99</sup>	Antibacterial – a <sup>99</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>23</sub> H <sub>34</sub> O <sub>7</sub>	422
146	Penicillinolide A	<i>Penicillium</i> sp. SF-5292 <sup>100, 101</sup>	Anti-inflammatory – a <sup>100, 101</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>24</sub> O <sub>5</sub>	272
147	Phomol	<i>Phomopsis</i> sp. E02018 <sup>102</sup>	Antibacterial – a <sup>102</sup> Antifungal – a <sup>102</sup> Anti-inflammatory – a <sup>102</sup> Reporter gene assay – n/a <sup>102</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>36</sub> O <sub>7</sub>	412

		Plant growth inhibition – a <sup>102</sup>			
148	Phomolide A	<i>Phomopsis</i> sp. hzla01-1 <sup>103</sup>	Antibacterial – a <sup>103</sup> Antifungal – a <sup>103</sup> Cytotoxic – n/a <sup>103</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>16</sub> O <sub>3</sub> 208
149	Phomolide B	<i>Phomopsis</i> sp. hzla01-1 <sup>103</sup>	Antibacterial – a <sup>103</sup> Antifungal – a <sup>103</sup> Cytotoxic – n/a <sup>103</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>18</sub> O <sub>4</sub> 226
150	Phomolide C	<i>Phomopsis</i> sp. B27 <sup>104</sup> <i>Diaporthe</i> sp. <sup>105</sup>	Antibacterial – n/a <sup>104</sup> Antifungal – n/a <sup>105</sup> Antiproliferative – a <sup>105</sup> Cytotoxic – n/a <sup>104</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>30</sub> O <sub>6</sub> 342
151	Phomolide D	<i>Phomopsis</i> sp. A123 <sup>106</sup>	Antibacterial – n/a <sup>106</sup> Antifungal – n/a <sup>106</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>5</sub> 244
152	Phomolide E	<i>Phomopsis</i> sp. A123 <sup>106</sup>	Antibacterial – n/a <sup>106</sup> Antifungal – n/a <sup>106</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>18</sub> O <sub>5</sub> 242
153	Phomolide F	<i>Phomopsis</i> sp. A123 <sup>106</sup>	Antibacterial – n/a <sup>106</sup> Antifungal – n/a <sup>106</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>18</sub> O <sub>5</sub> 242
154	Phomolide G	<i>Phomopsis</i> sp. A123 <sup>106</sup>	Antibacterial – n/a <sup>106</sup> Antifungal – n/a <sup>106</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>5</sub> 244
155	Phomolide H	<i>Phomopsis</i> sp. A124 <sup>106</sup>	Antibacterial – n/a <sup>106</sup> Antifungal – n/a <sup>106</sup>	Fungi / <i>Ascomycota</i>	C <sub>13</sub> H <sub>22</sub> O <sub>5</sub> 258
156	Phoracantholide I	<i>Phoracantha</i> <i>synonyma</i> ( <i>Coleoptera</i> : <i>Cerambycidae</i> ) <sup>107</sup> <i>Mantidactylus</i> <i>femoralis</i> <sup>78</sup>	Not tested	Animalia / <i>Insecta</i> Animalia / <i>Amphibia</i>	C <sub>10</sub> H <sub>18</sub> O <sub>2</sub> 170
157	Phoracantholide J	<i>Phoracantha</i> <i>synonyma</i> ( <i>Coleoptera</i> : <i>Cerambycidae</i> ) <sup>107</sup> <i>Mantidactylus</i> <i>multiplicatus</i> <sup>108</sup>	Not tested	Animalia / <i>Insecta</i>	C <sub>10</sub> H <sub>16</sub> O <sub>2</sub> 168
158	Pinolide	<i>Didymella pinodes</i> CO-99 <sup>10</sup>	Phytotoxic – n/a <sup>10</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>5</sub> 244

<b>159</b>	Pinolidoxin	<i>Ascochyta pinodes</i> ITEM 1094 <sup>109</sup> <i>Didymella pinodes</i> CO-99 <sup>10</sup> <i>Phoma bellidis</i> HGX2 <sup>11</sup>	Antifungal – n/a <sup>17</sup> Cytotoxic – n/a <sup>11</sup> Mycotoxic/Zootoxic – n/a <sup>17</sup> Phytotoxic – a <sup>10, 109</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>26</sub> O <sub>6</sub>	338
<b>160</b>	Podospin A	<i>Podospora</i> sp. G214 <sup>110</sup>	Apoptosis assay – a <sup>110</sup> Cytotoxic – a <sup>110</sup> Immunosuppressive – a <sup>110</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>22</sub> O <sub>6</sub>	334
<b>161</b>	Podospin B	<i>Podospora</i> sp. G214 <sup>110</sup>	Cytotoxic – a <sup>110</sup> Immunosuppressive – a <sup>110</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>24</sub> O <sub>6</sub>	336
<b>162</b>	Podospin C	<i>Podospora</i> sp. G214 <sup>110</sup>	Cytotoxic – a <sup>110</sup> Immunosuppressive – a <sup>110</sup>	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>22</sub> O <sub>5</sub>	294
<b>163</b>	Presaccharothriolide X	<i>Saccharothrix</i> sp. A1506 <sup>111</sup>	Antifungal – a <sup>111</sup> Cytotoxic – a <sup>111</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>19</sub> H <sub>24</sub> O <sub>6</sub>	348
<b>164</b>	Putaminoxin A	<i>Phoma</i> <i>putaminum</i> <sup>112, 113</sup>	Antibacterial – n/a <sup>112</sup> Antifungal – a <sup>112</sup> Mycotoxic/Zootoxic – n/a <sup>112</sup> Phytotoxic – a <sup>112</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>3</sub>	212
<b>165</b>	Putaminoxin B	<i>Phoma</i> <i>putaminum</i> <sup>113</sup>	Antibacterial – n/a <sup>113</sup> Antifungal – n/a <sup>113</sup> Mycotoxic/Zootoxic – n/a <sup>113</sup> Phytotoxic – n/a <sup>113</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>24</sub> O <sub>3</sub>	240
<b>166</b>	Putaminoxin C	<i>Phoma</i> <i>putaminum</i> <sup>113</sup>	Antibacterial – a <sup>113</sup> Antifungal – n/a <sup>113</sup> Mycotoxic/Zootoxic – n/a <sup>113</sup> Phytotoxic – a	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>18</sub> O <sub>3</sub>	210
<b>167</b>	Putaminoxin D	<i>Phoma</i> <i>putaminum</i> <sup>114</sup>	Antifungal – n/a <sup>114</sup> Mycotoxic/Zootoxic – n/a <sup>114</sup> Phytotoxic – n/a <sup>114</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>24</sub> O <sub>3</sub>	240
<b>168</b>	Putaminoxin E	<i>Phoma</i> <i>putaminum</i> <sup>114</sup>	Antifungal – n/a <sup>114</sup> Mycotoxic/Zootoxic – n/a <sup>114</sup> Phytotoxic – n/a <sup>114</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>22</sub> O <sub>3</sub>	214
<b>169</b>	Pyrenolide A	<i>Pyrenophora teres</i> IFO 7508 <sup>115</sup>	Motility inhibitory – a <sup>80</sup> Zoosporicidal – a <sup>80</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>10</sub> O <sub>4</sub>	194

		<i>Curvularia</i> sp. PSU-F22 <sup>45</sup>				
		<i>Curvularia</i> sp. M12 <sup>80</sup>				
170	Pyrenolide B	<i>Pyrenophora teres</i> IF0 7508 <sup>116</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>12</sub> O <sub>3</sub>	180
171	Pyrenolide C	<i>Pyrenophora teres</i> IF0 7508 <sup>116</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>12</sub> O <sub>4</sub>	196
172	Pyridomacrolidin	<i>Beauveria bassiana</i> EPF-5 <sup>117</sup>	Antibacterial – n/a <sup>117</sup> Antifungal – n/a <sup>117</sup> Enzyme inhibitory – a <sup>117</sup>	Fungi / <i>Ascomycota</i>	C <sub>31</sub> H <sub>35</sub> NO <sub>10</sub>	581
173	Saccharothriolide A	<i>Saccharothrix</i> sp. A1506 <sup>118</sup>	Antibacterial – n/a <sup>118</sup> Cytotoxic – n/a <sup>118</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>26</sub> H <sub>31</sub> NO <sub>8</sub>	485
174	Saccharothriolide B	<i>Saccharothrix</i> sp. A1506 <sup>118</sup>	Antibacterial – a <sup>118</sup> Antifungal – a <sup>111</sup> Cytotoxic – a <sup>118</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>25</sub> H <sub>31</sub> NO <sub>7</sub>	457
175	Saccharothriolide C1	<i>Saccharothrix</i> sp. A1506 <sup>118</sup>	Antibacterial – n/a <sup>118</sup> Cytotoxic – n/a <sup>118</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>19</sub> H <sub>26</sub> O <sub>7</sub>	366
176	Saccharothriolide C2	<i>Saccharothrix</i> sp. A1506 with <i>Tsukamurella pulmonis</i> TP-B0596 <sup>119</sup>	Cytotoxic – n/a <sup>119</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>19</sub> H <sub>26</sub> O <sub>7</sub>	366
177	Saccharothriolide D	<i>Saccharothrix</i> sp. A1506 <sup>120</sup>	Cytotoxic – n/a <sup>120</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>26</sub> H <sub>31</sub> NO <sub>8</sub>	485
178	Saccharothriolide E	<i>Saccharothrix</i> sp. A1506 <sup>120</sup>	Cytotoxic – a <sup>120</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>25</sub> H <sub>31</sub> NO <sub>7</sub>	457
179	Saccharothriolide F	<i>Saccharothrix</i> sp. A1506 <sup>120</sup>	Cytotoxic – a <sup>120</sup>	Bacteria / <i>Actinomycetia</i>	C <sub>25</sub> H <sub>29</sub> NO <sub>8</sub>	471
180	Sch 642305	<i>Penicillium verrucosum</i> ILF-16214 <sup>121</sup>	Antibacterial – a <sup>121</sup> Enzyme inhibitory – a <sup>121</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>20</sub> O <sub>4</sub>	252
181	Seimatopolide A	<i>Seimatosporium discosioides</i> KACC 42490 <sup>122</sup>	Reporter gene assay – a <sup>122</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>32</sub> O <sub>5</sub>	328
182	Seimatopolide B	<i>Seimatosporium</i>	Reporter gene assay – a <sup>122</sup>	Fungi /	C <sub>18</sub> H <sub>32</sub> O <sub>4</sub>	312

		<i>discosoides</i> KACC 42490 <sup>122</sup>		<i>Ascomycota</i>		
<b>183</b>	Shikinefralide A	<i>Stachybotryaceae</i> sp. FKI-9632 <sup>123</sup>	Antibacterial – n/a <sup>123</sup> Antifungal – n/a <sup>123</sup> Antiparasitic – a <sup>123</sup> Cytotoxic – a <sup>123</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>28</sub> O <sub>7</sub>	404
<b>184</b>	Shikinefralide B	<i>Stachybotryaceae</i> sp. FKI-9632 <sup>123</sup>	Antibacterial – n/a <sup>123</sup> Antifungal – n/a <sup>123</sup> Antiparasitic – a <sup>123</sup> Cytotoxic – a <sup>123</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>28</sub> O <sub>7</sub>	404
<b>185</b>	Shikinefralide C	<i>Stachybotryaceae</i> sp. FKI-9632 <sup>123</sup>	Antibacterial – n/a <sup>123</sup> Antifungal – n/a <sup>123</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>28</sub> O <sub>8</sub>	420
<b>186</b>	Shikinefralide D	<i>Stachybotryaceae</i> sp. FKI-9632 <sup>123</sup>	Antibacterial – n/a <sup>123</sup> Antifungal – n/a <sup>123</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>28</sub> O <sub>8</sub>	420
<b>187</b>	Sporostatin (M-5032)	<i>Sporormiella</i> sp. M5032 (FERM P- 9506) <sup>124</sup>	Acute toxicity – n/a <sup>124</sup> Antibacterial – n/a <sup>124</sup> Antifungal – n/a <sup>124</sup> Enzyme inhibitory – a <sup>124</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>14</sub> O <sub>5</sub>	262
<b>188</b>	Stagonolide A	<i>Stagonospora cirsii</i> C-163 <sup>125</sup> <i>Stagonospora cirsii</i> S-47 <sup>67</sup>	Antialgal – a <sup>68</sup> Antibacterial – a <sup>67, 68, 125</sup> Antifungal – a <sup>67, 125</sup> Cytotoxic – a <sup>67, 68</sup> Herbicidal activity – a <sup>70</sup> Insecticidal – a <sup>67</sup> Mycotoxic/Zootoxic – a <sup>67, 125</sup> Phytotoxic – a <sup>67, 68, 125</sup> Plant growth inhibition – a <sup>68, 125</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>18</sub> O <sub>4</sub>	226
<b>189</b>	Stagonolide B	<i>Stagonospora cirsii</i> C-163 <sup>126</sup>	Mycotoxic/Zootoxic – n/a <sup>126</sup> Phytotoxic – n/a <sup>126</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>5</sub>	244
<b>190</b>	Stagonolide C	<i>Stagonospora cirsii</i> C-163 <sup>126</sup>	Mycotoxic/Zootoxic – a <sup>126</sup> Phytotoxic – n/a <sup>126</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>4</sub>	200
<b>191</b>	Stagonolide D	<i>Stagonospora cirsii</i> C-163 <sup>126</sup>	Mycotoxic/Zootoxic – n/a <sup>126</sup> Phytotoxic – n/a <sup>126</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
<b>192</b>	Stagonolide E	<i>Stagonospora cirsii</i>	Antibacterial – n/a <sup>45</sup>	Fungi /	C <sub>10</sub> H <sub>14</sub> O <sub>3</sub>	182

		C-163 <sup>126</sup> <i>Curvularia</i> sp. PSU-F22 <sup>45</sup>	Antifungal – n/a <sup>45</sup> Mycotoxic/Zootoxic – n/a <sup>126</sup> Phytotoxic – a <sup>126</sup>	<i>Ascomycota</i>		
<b>193</b>	Stagonolide F	<i>Stagonospora cirsii</i> C-163 <sup>126</sup>	Mycotoxic/Zootoxic – n/a <sup>126</sup> Phytotoxic – a <sup>126</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>3</sub>	184
<b>194</b>	Stagonolide I	<i>Stagonospora cirsii</i> C-163 <sup>46</sup>	Phytotoxic – a <sup>46</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>14</sub> O <sub>4</sub>	198
<b>195</b>	Stagonolide J	<i>Stagonospora cirsii</i> S-47 <sup>67</sup>	Antialgal – n/a <sup>68</sup> Antibacterial – n/a <sup>67, 68</sup> Antifungal – n/a <sup>67</sup> Cytotoxic – n/a <sup>67, 68</sup> Insecticidal – a <sup>67</sup> Mycotoxic/Zootoxic – n/a <sup>67</sup> Phytotoxic – a <sup>67, 68</sup> Plant growth inhibition – n/a <sup>68</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>4</sub>	228
<b>196</b>	Stagonolide K	<i>Stagonospora cirsii</i> S-47 <sup>67</sup>	Antialgal – n/a <sup>68</sup> Antibacterial – n/a <sup>67, 68</sup> Antifungal – n/a <sup>67</sup> Cytotoxic – n/a <sup>67, 68</sup> Herbicidal activity – a <sup>70</sup> Insecticidal – a <sup>67</sup> Mycotoxic/Zootoxic – n/a <sup>67</sup> Phytotoxic – a <sup>67, 68</sup> Plant growth inhibition – a <sup>68</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>20</sub> O <sub>3</sub>	212
<b>197</b>	Stomopneulactone A	<i>Stomopneustes variolaris</i> <sup>127</sup>	Anti-inflammatory – a <sup>127</sup> Antioxidant – a <sup>127</sup>	Animalia / <i>Echinoidea</i>	C <sub>16</sub> H <sub>26</sub> O <sub>5</sub>	298
<b>198</b>	Stomopneulactone B	<i>Stomopneustes variolaris</i> <sup>127</sup>	Anti-inflammatory – a <sup>127</sup> Antioxidant – a <sup>127</sup>	Animalia / <i>Echinoidea</i>	C <sub>16</sub> H <sub>26</sub> O <sub>4</sub>	282
<b>199</b>	Sumalactone A	<i>Penicillium sumatrense</i> MCCC 3A00612 <sup>128</sup>	Anti-inflammatory – n/a <sup>128</sup>	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>20</sub> O <sub>6</sub>	308
<b>200</b>	Sumalactone B	<i>Penicillium sumatrense</i> MCCC 3A00612 <sup>128</sup>	Anti-inflammatory – n/a <sup>128</sup>	Fungi / <i>Ascomycota</i>	C <sub>16</sub> H <sub>20</sub> O <sub>6</sub>	308

<b>201</b>	Thiobiscephalosporolide A	<i>Cephalosporium aphidicola</i> ACC 3490 <sup>129</sup>	Not tested	Fungi / <i>Ascomycota</i>	C <sub>20</sub> H <sub>30</sub> SO <sub>8</sub>	430
<b>202</b>	Truncatenolide	<i>Colletotrichum truncatum</i> 17-5-5 <sup>130</sup>	Antifungal – a <sup>130</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>3</sub>	184
<b>203</b>	Tuckolide = Decarestrictine D	<i>Polyporus tuberaster</i> <sup>131</sup> <i>Penicillium simplicissimum</i> FH-A 6090 <sup>49, 50</sup> <i>Botryotrichum</i> sp. NRRL 38180 ( <i>Chaetomium piluliferum</i> ) <sup>30</sup>	Antibacterial – n/a <sup>49</sup> Antifeedant – n/a <sup>131</sup> Antifungal – n/a <sup>49</sup> Antiprotozoal – n/a <sup>49</sup> Antiviral – n/a <sup>49</sup> Cholesterol biosynthesis inhibition – a <sup>49</sup> Hypolipidemic – a <sup>49</sup>	Fungi / <i>Ascomycota</i>	C <sub>10</sub> H <sub>16</sub> O <sub>5</sub>	216
<b>204</b>	Xestodecalactone A	<i>Penicillium cf. montanense</i> <sup>132</sup>	Antibacterial – n/a <sup>132</sup> Antifungal – n/a <sup>132</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>16</sub> O <sub>5</sub>	264
<b>205</b>	Xestodecalactone B	<i>Penicillium cf. montanense</i> <sup>132</sup>	Antibacterial – n/a <sup>132</sup> Antifungal – a <sup>132</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>16</sub> O <sub>6</sub>	280
<b>206</b>	Xestodecalactone C	<i>Penicillium cf. montanense</i> <sup>132</sup>	Antibacterial – n/a <sup>132</sup> Antifungal – n/a <sup>132</sup>	Fungi / <i>Ascomycota</i>	C <sub>14</sub> H <sub>16</sub> O <sub>6</sub>	280
<b>207</b>	Xestodecalactone D	<i>Corynespora cassiicola</i> <sup>133</sup>	Antibacterial – n/a <sup>133</sup> Antifungal – n/a <sup>133</sup> Cytotoxic – n/a <sup>133</sup>	Fungi / <i>Ascomycota</i>	C <sub>15</sub> H <sub>18</sub> O <sub>7</sub>	310
<b>208</b>	Xestodecalactone E	<i>Corynespora cassiicola</i> <sup>133</sup>	Antibacterial – n/a <sup>133</sup> Antifungal – n/a <sup>133</sup> Cytotoxic – n/a <sup>133</sup>	Fungi / <i>Ascomycota</i>	C <sub>19</sub> H <sub>26</sub> O <sub>7</sub>	366
<b>209</b>	Xestodecalactone F	<i>Corynespora cassiicola</i> <sup>133</sup>	Antibacterial – n/a <sup>133</sup> Antifungal – n/a <sup>133</sup> Cytotoxic – n/a <sup>133</sup>	Fungi / <i>Ascomycota</i>	C <sub>19</sub> H <sub>26</sub> O <sub>6</sub>	350
<b>210</b>	Xylarolide	<i>Xylaria</i> sp. 101 <sup>134</sup>	Antibacterial – n/a <sup>134, 135</sup> Antifungal – a <sup>134</sup> Cytotoxic – a <sup>135</sup> Radical scavenging – n/a <sup>135</sup>	Fungi / <i>Ascomycota</i>	C <sub>12</sub> H <sub>18</sub> O <sub>4</sub>	226
<b>211</b>	Xylarolide A	<i>Diaporthe</i> sp. LG23 <sup>135</sup>	Antibacterial – n/a <sup>135</sup> Cytotoxic – a <sup>135</sup>	Fungi / <i>Ascomycota</i>	C <sub>22</sub> H <sub>28</sub> O <sub>7</sub>	404

			Radical scavenging – a <sup>135</sup>			
<b>212</b>	Xylarolide B	<i>Diaporthe</i> sp. LG23 <sup>135</sup>	Antibacterial – n/a <sup>135</sup> Cytotoxic – a <sup>135</sup> Radical scavenging – n/a <sup>135</sup>	Fungi / <i>Ascomycota</i>	C <sub>13</sub> H <sub>20</sub> O <sub>4</sub>	240
<b>213</b>	Xyolide	<i>Xylaria feejeensis</i> MG871188 <sup>136</sup>	Antifungal – a <sup>136</sup>	Fungi / <i>Ascomycota</i>	C <sub>20</sub> H <sub>32</sub> O <sub>8</sub>	400
<b>214</b>	Z-4,6,9-trihydroxy-10-nonyl-3,4,5,6,9,10-hexahydrooxecin-2-one	<i>Tubercularia</i> sp. TF5 <sup>137</sup>	Antibacterial – n/a <sup>137</sup> Antifungal – n/a <sup>137</sup> Cytotoxic – a <sup>137</sup>	Fungi / <i>Ascomycota</i>	C <sub>18</sub> H <sub>32</sub> O <sub>5</sub>	328

**a** – active;

**n/a** – not active

\* – IC<sub>50</sub>, MIC and other experimental details related to the biological activity of TMLs can be found in the extended version of Table S1 in .xlsx format. This file is available upon request to the corresponding author.

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