

**S5A Table. The gene and product names of the Terpene type gene cluster.**

| <b>Gene</b> | <b>Product</b>   |
|-------------|--|
| gmr         | Cyclic di-GMP phosphodiesterase Gmr                      |
| crp         | cAMP receptor protein                                    |
| tag-1       | no_tag   |
| arcB        | Aerobic respiration control sensor protein ArcB          |
| luxR        | Transcriptional activator                                |
| crtB        | All-trans-phytoene synthase                              |
| zraS        | Sensor protein ZraS                                      |
| zraR        | Transcriptional regulatory protein ZraR                  |
| tag-2       | Plasmid maintenance system killer protein                |
| yddM        | putative HTH-type transcriptional regulator YddM         |
| carA        | Carbamoyl-phosphate synthase small chain                 |
| ilvB        | Acetolactate synthase large subunit                      |
| hypB        | Hydrogenase isoenzymes nickel incorporation protein HypB |
| tag-3       | Cytochrome c' precursor                                  |

**S5B Table. The gene and product names of the gene cluster, related with the potentially biosynthesis of a non-classified secondary metabolite.**

| <b>Gene</b> | <b>Product</b>                               |
|-------------|--|
| tag-1       | Hypothetical protein                         |
| trxA        | Thioredoxin-1                                |
| sgpA        | Sulfur globule protein CV1 precursor         |
| mdtC        | Multidrug resistance protein MdtC            |
| tag-2       | Putative efflux pump membrane fusion protein |
| tag-3       | Hypothetical protein                         |

|        |   |
|--------|---|
| plsC   | 1-acyl-sn-glycerol-3-phosphate acyltransferase                |
| tag-4  | D-glycero-beta-D-manno-heptose-1,7-bisphosphate 7-phosphatase |
| tag-5  | MazG nucleotide pyrophosphohydrolase domain protein           |
| thrC   | Threonine synthase  |
| tag-6  | Hypothetical protein  |
| tag-7  | Recombination protein F                                       |
| hom    | Homoserine dehydrogenase                                      |
| alaC   | Glutamate-pyruvate aminotransferase AlaC                      |
| rpsU   | 30S ribosomal protein S21                                     |
| tag-8  | Yqey-like protein   |
| dnaG   | DNA primase   |
| rpoD   | RNA polymerase sigma factor RpoD                              |
| pksJ   | Polyketide synthase PksJ                                      |
| cysM   | Cysteine synthase B   |
| tag-9  | Rhomboid family protein                                       |
| ydaM   | Putative diguanylate cyclase YdaM                             |
| podJ   | Localization factor PodJL                                     |
| leuS   | Leucine--tRNA ligase  |
| tag-10 | Hypothetical protein  |
| tag-11 | ABC transporter ATP-binding protein                           |
| mepM   | Murein DD-endopeptidase MepM                                  |
| gyrB   | DNA gyrase subunit B  |
| tag-12 | Hypothetical protein  |
| mreB   | Rod shape-determining protein MreB                            |
| mreC   | Cell shape-determining protein MreC                           |
| mreD   | Rod shape-determining protein MreD                            |

|       |  |
|-------|--|
| spoVD | Stage V sporulation protein D                    |
| arpB  | Antibiotic efflux pump membrane transporter ArpB |