**Supplementary Material**

**Adults of sun-coral *Tubastraea coccinea* are resistant to new antifouling biocides**

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**Figure S1.** Map showing the sampling site of colonies of *Tubastraea coccínea* (sun-coral) in the Alcatrazes Archipelago, SP, Brazil. Source: Google Earth (2022).

Table S1. Concentration of the test-substances during the experiments with antifouling biocides and the sun-coral *Tubastraea coccinea*.

|  |  |
| --- | --- |
| **Substance** | **Concentrations (µg L-1)** |
| DCOIT | 3.33 1033.3100 |
| SiNC | 500 1000 2000 4000  |
| SiNC-DCOIT | 74.1 222.2 666.7 2000 |
| SiNC-DCOIT-Ag | 74.1222.2666.72000 |

Table S2. Physicochemical parameters of test-solutions measured in the start and the end of the experiments with *Tubastraea coccinea* and new antifouling biocides.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Treatment | Concentration (µg L-1) | Replicate (n.) | pH | T (°C) | D.O. (%) |
| initial | final | initial | final | initial | final |
| Control | - | 1 | 7.79 | 7.90 | 23.5 | 23.2 | 79.7 | 88.7 |
| - | 2 | 7.79 | 7.97 | 23.5 | 23.2 | 80.1 | 87.8 |
| - | 3 | 7.74 | 7.89 | 23.5 | 23.2 | 79.3 | 87.0 |
| DCOIT | 3.3310 | 11 | 7.667.56 | 7.967.82 | 23.723.7 | 22.723.1 | 83.377.9 | 89.293.4 |
| 33 | 3 | 7.57 | 7.69 | 23.8 | 22.8 | 83.8 | 94.3 |
| 100 | 3 | 7.65 | 7.99 | 24.0 | 23.2 | 80.1 | 97.6 |
| SiNC | 5001000 | 11 | 7.927.94 | 7.978.01 | 24.423.5 | 23.823.2 | 91.783.8 | 97.594.4 |
| 2000 | 2 | 7.97 | 8.03 | 24.1 | 23.3 | 89.6 | 94.4 |
| 4000 | 1 | 7.82 | 7.98 | 24.2 | 23.3 | 83.9 | 91.9 |
| SiNC-DCOIT | 74.1 | 1 | 7.61 | 7.90 | 23.9 | 23.8 | 75.5 | 86.1 |
| 222.2 | 2 | 7.83 | 7.85 | 23.4 | 23.6 | 81.1 | 88.0 |
| 666.7 | 1 | 7.76 | 7.89 | 24.1 | 23.7 | 83.5 | 83.8 |
| 2000 | 1 | 7.88 | 7.98 | 23.6 | 23.8 | 84.5 | 92.6 |
| SiNC-DCOIT-Ag | 74.1 | 1 | 7.86 | 7.99 | 23.3 | 23.5 | 87.7 | 88.4 |
| 222.2 | 3 | 7.88 | 7.99 | 23.3 | 23.3 | 82.0 | 87.4 |
| 666.7 | 2 | 7.81 | 8.02 | 23.4 | 23.5 | 81.9 | 89.1 |
| 2000 | 3 | 7.88 | 7.99 | 23.4 | 23.4 | 85.5 | 88.7 |

Table S3. Raw data regarding the effects of new antifouling biocides on colonies of *Tubastraea coccinea*, for each experimental replicate.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Treatment | Concentration (µg L-1) | Replicate (n.) | Total of polyps (n.) | Tissue loss / polyp (n.) | Algae on polyps margins (Presence/Absence) |
| Control | - | 1 | 19 | 3 | Absent |
| - | 2 | 17 | 6 | Present |
| - | 3 | 14 | 0 | Present |
| DCOIT | 3.33 | 1 | 14 | 1 | Absent |
| 2 | 17 | 7 | Present |
| 3 | 15 | 3 | Present |
| 10 | 1 | 13 | 6 | Present |
| 2 | 15 | 3 | Present |
| 3 | 16 | 6 | Absent |
| 33 | 1 | 13 | 2 | Absent |
| 2 | 12 | 3 | Present |
| 3 | 12 | 5 | Present |
| 100 | 1 | 13 | 3 | Present |
| 2 | 20 | 3 | Absent |
| 3 | 11 | 5 | Present |
| SiNC | 500 | 1 | 8 | 0 | Absent |
| 2 | 17 | 0 | Absent |
| 3 | 12 | 0 | Absent |
| 1000 | 1 | 9 | 0 | Absent |
| 2 | 12 | 0 | Absent |
| 3 | 13 | 0 | Absent |
| 2000 | 1 | 10 | 0 | Absent |
| 2 | 7 | 0 | Absent |
| 3 | 11 | 0 | Absent |
| 4000 | 1 | 11 | 0 | Absent |
| 2 | 14 | 0 | Absent |
| 3 | 12 | 0 | Absent |
| SiNC-DCOIT | 74.1 | 1 | 13 | 2 | Present |
| 2 | 18 | 3 | Present |
| 3 | 15 | 3 | Absent |
| 222.2 | 1 | 15 | 7 | Present |
| 2 | 15 | 8 | Present |
| 3 | 11 | 6 | Present |
| 666.7 | 1 | 10 | 2 | Absent |
| 2 | 12 | 0 | Absent |
| 3 | 11 | 0 | Absent |
| 2000 | 1 | 9 | 0 | Absent |
| 2 | 8 | 0 | Absent |
| 3 | 10 | 1 | Absent |
| SiNC-DCOIT-Ag | 74.1 | 1 | 16 | 4 | Present |
| 2 | 19 | 8 | Present |
| 3 | 21 | 6 | Present |
| 222,2 | 1 | 15 | 6 | Present |
| 2 | 13 | 8 | Present |
| 3 | 14 | 1 | Absent |
| 666.7 | 1 | 17 | 5 | Absent |
| 2 | 20 | 20 | Present |
| 3 | 20 | 18 | Present |
| 2000 | 1 | 19 | 7 | Present |
| 2 | 12 | 3 | Present |
| 3 | 20 | 5 | Absent |