**Table. S1:** Screening results of liquid-liquid partition extracts of *S. erianthum* against MSG5 screening system.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sample | Fraction | Concentration  (mg/ml) | MSG5 | | |
| Glucose  x̅ ± s (mm) | Galactose  x̅ ± s (mm) | Remarks |
| *S, erianthum* | Chloroform extract (CE) | 100 | 9.50 ± 0.58 | 11.00± 0.00 | Inconsistent/  Toxic |
| 70 | NT | NT | NT |
| 50 | NT | NT | NT |
| 30 | NT | NT | NT |
| 10 | NT | NT | NT |
| 1 | NT | NT | NT |
| Chloroform-methanol extract (CME) | 100 | 10.88±1.44 | 10.50±1.29 | Toxic |
| 70 | 10.63±0.48 | 10.13±0.25 | Toxic |
| 50 | 10.25±0.29 | 10.00±0.00 | Toxic |
| 30 | 10.13±0.25 | 9.88±0.25 | Toxic |
| 10 | 9.38±0.25 | 9.00±0.71 | Toxic |
| 1 | G | G | No activity |
| Butanol extract (BE) | 100 | 7.00± 0.00 | 7.00± 0.00 | Inconsistent/Toxic |

Notes: G = Growth, NG = No Growth.

**Table. S2:** Screening results of liquid-liquid partition extracts of *M. mollissimus* and *S. erianthum* against PP1 screening system

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | Fraction | Concentration (mg/ml) | Yeast based screening system | | | | | | | | |
| PAY704-1 | | | | PAY700-4 | | | | Remarks |
| YPD  Inhibition  x̅ ± s (mm) | | YPD+S  Inhibition  x̅ ± s (mm) | | YPD  Inhibition  x̅ ± s (mm) | | YPD+S  Inhibition  x̅ ± s (mm) | |
| 28◦C | 37◦C | 28◦C | 37◦C | 28◦C | 37◦C | 28◦C | 37◦C |
| *M. mollissimus* | Chloroform extract (CE) | 100 | 10.50 ±0.71 | 19.00 ±0.00 | 9.50 ±0.71 | 9.00 ±0.00 | 14.00 ±0.00 | NG | 10.00 ±1.41 | 10.50 ±0.71 | Toxic |
| 70 | 10.00 ±0.00 | 17.00±  0.00 | 9.00 ±0.00 | 8.50 ±0.71 | 13.50 ±0.71 | NG | 9.50 ±0.71 | 10.00 ±0.00 | Toxic |
| 50 | 9.50 ±0.71 | 14.00±  0.00 | 8.50 ±0.71 | 7.50 ±0.71 | 12.50 ±0.71 | NG | 8.00± 0.00 | 8.50 ±0.71 | Toxic |
| 30 | 9.00 ±0.00 | 14.00±  0.00 | 7.50 ±0.71 | 7.00 ±0.00 | 12.50 ±0.71 | NG | 7.50± 0.71 | 7.50± 0.71 | Toxic |
| 10 | 8.00 ±0.00 | 10.00 ± 0.00 | 7.00 ±0.0 | G | 11.00 ±1.41 | NG | G | G | Toxic |
| 1 | G | G | G | G | G | NG | G | G | No activity |
| CE.F1 | 10 | 9.50± 0.71 | 14.50± 0.71 | 7.50± 0.71 | 7.50±  0.71 | 9.50± 2.12 | NG | 7.00± 0.00 | 8.00± 0.00 | Toxic |
| CE.F2 | 10 | 9.50± 2.12 | 14.50± 3.54 | 8.50± 0.71 | 8.50±  0.71 | 9.00± 0.00 | NG | 7.00± 0.00 | 8.50± 0.71 | Toxic |
| Chloroform-methanol extract (CME | 100 | G | G | G | G | G | NG | G | G | No activity |
|  | Butanol extract (BE) | 100 | G | G | G | G | G | NG | G | G | No activity |
| *S, erianthum* | Chloroform extract (CE) | 100 | G | 13.00± 1.41 | G | G | G | NG | G | G | Inhibitor\*\*\* |
| 70 | G | 12.25± 3.10 | G | G | G | NG | G | G | Inhibitor\*\*\* |
| 50 | G | 10.75± 2.22 | G | G | G | NG | G | G | Inhibitor\*\*\* |
| 30 | G | 9.25±  2.22 | G | G | G | NG | G | G | Inhibitor\*\*\* |
| 10 | G | 8.50±  1.73 | G | G | G | NG | G | G | Inhibitor\*\*\* |
| 1 | G | G | G | G | G | NG | G | G | No activity |
| CE.F1 | 10 | G | G | G | 13.33± 1.51 | G | NG | G | G | Mpk1 cascade  inhibitor |
| CE.F2 | 10 | G | G | G | 12.00± 2.65 | G | NG | G | G | Mpk1 cascade  inhibitor |
| CE.F9 | 10 | 12.33± 3.79 | G | 10.67± 2.31 | 11.67± 1.53 | 11.33± 2.89 | NG | 9.33± 1.15 | 9.33± 2.89 | Toxic |
| Chloroform-methanol extract (CME) | 100 | 10.50± 0.71 | 14.50± 0.71 | 8.50±  0.71 | 8.50± 0.71 | 12.50± 0.71 | NG | 9.50±  0.71 | 11.50 ±0.71 | Toxic |
| 70 | 9.50± 0.71 | 14.25± 3.10 | 8.00± 0.00 | 8.00± 1.15 | 11.50± 0.00 | NG | 8.50±  0.71 | 11.25± 2.22 | Toxic |
| 50 | 8.25± 0.71 | 13.75± 2.22 | 7.00± 0.00 | 7.75± 0.50 | 10.00± 0.00 | NG | 8.00± 0.00 | 8.25± 0.71 | Toxic |
| 30 | 7.50± 0.71 | 11.25± 2.22 | 7.00± 0.00 | 7.00± 0.00 | 8.25± 0.71 | NG | 7.00± 0.00 | 7.00± 0.00 | Toxic |
| 10 | 7.00± 0.71 | 9.50±  1.73 | G | 6.75± 0.50 | 7.50± 0.71 | NG | G | G | Toxic |
| 1 | G | G | G | G | G | NG | G | G | No activity |
| Butanol extract (BE) | 100 | G | G | G | G | G | NG | G | G | No activity |

**Notes**: G = Growth, NG = No Growth. Only fraction showing activity were shown.

Inhibitor\*\*\* - an inhibitor that is able to inhibit normal GLC7 that is reversible by 1M Sorbitol (growth) or not (inhibited growth) without affecting the mutant GLC7 because glc7-10 allele