**Sample List with m/z's of Interest:**

UNTP (9.21.21)

UNTP (9.28.21)

Pond 7 (10.5.21)

Pond 6 (9.21.21)

Pond 6 (9.28.21)

Pond 5 (9.14.21)

Pond 5 (9.21.21)

Pond 5 (9.28.21)
Pond 5 (10.5.21)
Pond 5 (10.12.21)
Pond 5d (9.21.21)

Pond 5d (9.28.21)
Pond 1 (9.14.21)
Pond 1 (9.21.21)
Pond 1 (9.28.21)

Bridge (10.12.21)

**Table 1:** Class, mass range, and diagnostic fragments of cyanopeptolins, aeruginosins, anabaenopeptins, and microginins.1

|  |  |  |
| --- | --- | --- |
| **Class** | **Mass range** | **Diagnostic fragment m/z** |
| Cyanopeptolins | Above 900 | Ahp-Phe 181, Ahp-Leu 215 |
| Aeruginosins | 550-700 | 140 Choi |
| Anabaenopeptins | 800-1000 | - |
| Microginins | 574-930 Da | 128 Adha  |

Additionally, we are interested in compounds that have been prenylated. These compounds show a neutral loss of 68.

Below I have grouped them based on location/date:

|  |  |
| --- | --- |
| **Location/Date** | **Compound****m/z** |
| Pond 5 (9.21.21) | **519.1866** |
| Pond 5d (9.21.21) | **519.1801** |
| Pond 5d (9.21.21) | **519.1913** |
| Pond 5 (9.14.21) | **525.2942** |
| Pond 1 (9.14.21) | **525.2942** |
| Pond 1 (9.21.21) | **525.2942** |
| Pond 5 (10.12.21) | **527.1454** |
| Pond 5d (10.12.21) | **527.1454** |
| Bridge (10.12.21) | **527.1454** |
| Pond 5 (9.21.21) | **541.1830** |
| Pond 5d (9.21.21) | **541.2352** |
| Pond 5d (9.28.21) | **541.1876** |
| Pond 1 (9.14.21) | **569.3151** |
| Pond 1 (9.28.21) | **569.3249** |
| Pond 5 (9.28.21) | **612.2137** |
| Pond 5 (10.5.21) | **612.2125** |
| Pond 5 (10.12.21) | **612.2123** |
| Pond 5 (9.14.21) | **615.2101** |
| Pond 5 (9.28.21) | **615.2238** |
| Pond 5d (9.21.21) | **615.2107** |
| Pond 5d (10.12.21) | **615.1989** |
| Pond 1 (9.14.21) | **615.2136** |
| Pond 1 (9.28.21) | **615.2238** |
| Pond 6 (9.28.21) | **626.2287** |
| Pond 5 (9.28.21) | **626.2291** |
| Pond 5 (10.5.21) | **626.2294** |
| Pond 5 (10.12.21) | **626.2126** |
| Pond 5d (10.12.21) | **626.2126** |
| UNTP (9.21.21) | **689.2105** |
| UNTP (9.28.21) | **689.2110** |
| Pond 6 (9.21.21) | **689.2124** |
| Pond 5d (10.5.21) | **689.2109** |
| Bridge (10.12.21) | **689.2115** |
| UNTP (9.28.21) | **851.2679** |
| Pond 6 (9.21.21) | **851.2648** |
| Pond 6 (9.28.21) | **995.3073** |
| Pond 5 (9.28.21) | **995.3063** |
| Pond 5 (10.5.21) | **995.2883** |
| Pond 5 (10.12.21) | **995.3071** |
| Pond 5d (10.12.21) | **995.3080** |
| Pond 6 (9.28.21) | **1009.3235** |
| Pond 5 (9.21.21) | **1009.3226** |
| Pond 5 (9.28.21) | **1009.3210** |
| Pond 5 (10.12.21) | **1009.2970** |
| Pond 5d (9.28.21) | **1009.3227** |
| Pond 5 (10.12.21) | **1009.2970** |
| Pond 7 (10.5.21) | **1013.3173** |
| Pond 5d (10.5.21) | **1013.3164** |
| Bridge (10.12.21) | **1013.3169** |
| Pond 5 (9.21.21) | **1037.3258** |
| Pond 5 (10.5.21) | **1037.3164** |
| Pond 5 (10.12.21) | **1037.3173** |
| Pond 5d (10.12.21) | **1037.3175** |
| Pond 6 (9.28.21) | **1157.3582** |
| Pond 5 (9.21.21) | **1157.3594** |
| Pond 5 (9.28.21) | **1157.3578** |
| Pond 5 (10.12.21) | **1157.3572** |
| Pond 5d (9.28.21) | **1157.3591** |
| Pond 1 (9.1421) | **1185.3870** |
| Pond 1 (9.28.21) | **1185.4240** |
| Pond 5 (9.21.21) | **1199.3713** |
| Pond 5 (9.28.21) | **1199.4061** |
| Pond 1 (9.14.21) | **1199.3973** |
| Pond 1 (9.28.21) | **1199.4060** |

**Reference**

(1) Welker, M.; Maršálek, B.; Šejnohová, L.; von Döhren, H. Detection and Identification of Oligopeptides in Microcystis (Cyanobacteria) Colonies: Toward an Understanding of Metabolic Diversity. *Peptides* **2006**, *27* (9), 2090–2103.