

**Results:**

Glucosinolate Concentrations from Greenhouse Grown Mustards

**2000 - Unreplicated**

| Glucosinolate, <b>Bold</b> =ITC producing | <i>S. alba</i>   |          |           |                  |          |           |
|---|------------------|----------|-----------|------------------|----------|-----------|
|   | Roots            |          |           | Shoots           |          |           |
|   | Tilney           | Ida gold | Martigena | Tilney           | Ida gold | Martigena |
|   | -----umol/g----- |          |           | -----umol/g----- |          |           |
| S-2-hydroxy-3-butenyl                     | 3.5              | 4.3      | 4.7       | 4.2              | 5.3      | 5.5       |
| <b>4-hydroxybenzyl</b>                    | 7.3              | 7.6      | 10.4      | 25.6             | 36.0     | 31.0      |
| <b>3-butenyl</b>                          | 0.0              | 0.0      | 0.0       | 0.1              | 0.5      | 0.5       |
| 4-hydroxy-3-indolylmethyl                 | 0.4              | 0.4      | 0.5       | 0.0              | 0.0      | 0.0       |
| <b>4-pentenyl</b>                         | 0.1              | 0.1      | 0.0       | 0.0              | 0.0      | 0.0       |
| <b>benzyl</b>                             | 0.7              | 0.5      | 0.8       | 1.5              | 1.9      | 2.7       |
| <b>4-methylthiobutyl</b>                  | 3.3              | 3.6      | 5.6       | 0.0              | 0.0      | 0.0       |
| 3-indolylmethyl                           | 0.3              | 1.4      | 0.6       | 0.1              | 0.2      | 0.3       |
| <b>phenylethyl</b>                        | 7.2              | 5.6      | 3.8       | 0.3              | 0.2      | 0.2       |
| 4-methoxy-3-indolylmethyl                 | 2.7              | 5.3      | 3.2       | 0.0              | 0.1      | 0.1       |
| 1-methoxy-3-indolylmethyl                 | 5.2              | 5.7      | 4.3       | 0.0              | 0.0      | 0.0       |
| <b>Total (ITC producing)</b>              | 18.6             | 17.3     | 20.6      | 27.6             | 38.5     | 34.4      |

ITC = Isothiocyanate

| Glucosinolate, <b>Bold</b> =ITC producing | <i>B. juncea</i> |        |                  |        |
|---|------------------|--------|------------------|--------|
|   | Roots            |        | Shoots           |        |
|   | Pac. gold        | Vulcan | Pac. gold        | Vulcan |
|   | -----umol/g----- |        | -----umol/g----- |        |
| <b>allyl (nat.)</b>                       | 7.8              | 5.6    | 50.4             | 46.4   |
| <b>4-hydroxybenzyl</b>                    | 0.0              | 0.0    | 0.2              | 0.2    |
| <b>3-butenyl</b>                          | 0.1              | 0.0    | 0.3              | 0.2    |
| 4-hydroxy-3-indolylmethyl                 | 0.6              | 0.5    | 0.3              | 0.3    |
| <b>benzyl</b>                             | 0.0              | 0.0    | 0.1              | 0.1    |
| 3-indolylmethyl                           | 0.8              | 0.4    | 0.1              | 0.1    |
| <b>phenylethyl</b>                        | 10.5             | 8.2    | 0.3              | 0.3    |
| 4-methoxy-3-indolylmethyl                 | 4.7              | 2.5    | 0.0              | 0.0    |
| 1-methoxy-3-indolylmethyl                 | 6.4              | 4.3    | 0.0              | 0.0    |
| <b>Total (ITC producing)</b>              | 18.4             | 13.7   | 51.3             | 47.2   |

ITC = Isothiocyanate

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