

## EDITOR'S NOTE: RATIOS OF NUTRIENT UPTAKE BY ASPARAGUS PLANTS

The following data was taken and reformatted from the following publication by J.A. Espejo which was published in the last Asparagus Research Newsletter. I thought that this information may have been overlooked by many of the subscribers to the ARN.

### Influence of the Phosphoric Fertilization in the Formation of Dry Matter and Nutrient Extraction in a Crop of Green Asparagus (*Asparagus officinalis*)

Espejo, J.A. et al, (2001) Asparagus Research Newsletter, Vol. 17, March 2001, Ed. B. Benson

## RATIOS OF NUTRIENT UPTAKE BY ASPARAGUS PLANTS

---

Uptake of Nutrients **in relation to PHOSPHORUS** based on **only foliar** data:

| <u>Data source</u>        | <u>N</u> | <u>P</u> | <u>K</u> | <u>Ca</u> | <u>Mg</u> |
|---------------------------|----------|----------|----------|-----------|-----------|
| Depardon and Baron (1947) | 3.71     | 1        | 3.80     | 2.13      | 0.41      |
| Brown and Carolus (1965)  | 4.39     | 1        | 5.33     | 1.52      | 0.36      |
| Lubet et al. (1975)       | 4.47     | 1        | 4.00     | 1.23      | 0.18      |
| Hartmann et al (1983)     | 3.38     | 1        | 3.69     | 4.92      | 0.25      |
| Average                   | 3.98     | 1        | 4.20     | 2.45      | 0.30      |

Uptake of Nutrients **in relation to PHOSPHORUS** based on **foliar and root** data:

|                           |      |   |      |      |      |
|---------------------------|------|---|------|------|------|
| Espejo, J.A. et al (2001) | 5.89 | 1 | 6.57 | 3.23 | 0.49 |
|---------------------------|------|---|------|------|------|

---

Uptake of Nutrients **in relation to NITROGEN** based on **only foliar** data:

| <u>Data source</u>        | <u>N</u> | <u>P</u> | <u>K</u> | <u>Ca</u> | <u>Mg</u> |
|---------------------------|----------|----------|----------|-----------|-----------|
| Depardon and Baron (1947) | 1        | 0.27     | 1.02     | 0.57      | 0.11      |
| Brown and Carolus (1965)  | 1        | 0.23     | 1.21     | 0.35      | 0.08      |
| Lubet et al. (1975)       | 1        | 0.22     | 0.90     | 0.28      | 0.04      |
| Hartmann et al (1983)     | 1        | 0.30     | 1.09     | 1.45      | 0.07      |

|         |   |      |      |      |      |
|---------|---|------|------|------|------|
| Average | 1 | 0.25 | 1.05 | 0.66 | 0.07 |
|---------|---|------|------|------|------|

Uptake of Nutrients in relation to NITROGEN based on foliar and root data:

|                          |   |      |      |      |      |
|--------------------------|---|------|------|------|------|
| Espejo,J.A. et al (2001) | 1 | 0.17 | 1.12 | 0.54 | 0.08 |
|--------------------------|---|------|------|------|------|