**Supplementary materials**

**Table S1**

**Table S1. Comparison of Protein Content and Amino Acid Composition among Different Species**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Genus / Species* | Protein | Asp | Ser | Glu | Gly | His | Arg | Thr | Ala | Pro | Tyr | Val | Lys | Ile | Leu | Phe | Trp |
| *Arundinaria / chino* | 12.4 | 14.94 | 6.36 | 15.46 | 7.03 | 2.35 | 7.19 | 5.86 | 8.43 | 8.97 | 3.67 | 7.91 | 6.76 | 5.35 | 10.51 | 6.63 | 1.93 |
| *Arundinaria / hindsii* | 13.97 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Arundinaria / oleosa* | 12.74 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Bambusa / balcooa* | 13.82 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Bambusa / bambos* | 12.93 | 11.15 | 4.87 | 9.43 | 5.75 | 2.07 | 5.87 | 4.86 | 6.72 | 7.43 | 3.32 | 5.78 | 5.25 | 4.5 | 8.81 | 5.75 | 1.84 |
| *Bambusa / contracta* | 13.62 | 12.06 | 5.25 | 11.18 | 6.69 | 1.98 | 5.73 | 5.17 | 7.04 | 8.49 | 3.81 | 5.9 | 4.96 | 4.56 | 9.65 | 6.49 | 1.95 |
| *Bambusa / dissimulator* | 9.53 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Bambusa / emeiensis* | 12.35 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Bambusa / gibba* | 14.66 | 13.41 | 5.38 | 12.66 | 7.07 | 2.43 | 6.54 | 5.78 | 7.8 | 8.94 | 4.24 | 6.88 | 6.18 | 5.42 | 10.79 | 7.18 | 2.23 |
| *Bambusa / longispiculata* | 12.9 | 13.23 | 5.08 | 12.6 | 6.77 | 2.57 | 6.56 | 5.66 | 7.8 | 9.45 | 4.32 | 6.71 | 6.45 | 5.3 | 10.59 | 7.08 | 2.18 |
| *Bambusa / maculata* | 16.23 | 14.5 | 5.85 | 13.74 | 7.58 | 2.58 | 7.08 | 6.26 | 8.51 | 9.31 | 4.73 | 7.34 | 6.26 | 5.63 | 11.7 | 7.65 | 2.44 |
| *Bambusa / multiplex* | 14.27 | 12.19 | 5.04 | 12.17 | 6.34 | 2.11 | 6.24 | 5.11 | 7.17 | 7.71 | 3.51 | 6.57 | 5.73 | 4.71 | 9.45 | 6.06 | 1.67 |
| *Bambusa / oldhamii* | 12.59 | 11.95 | 4.77 | 11.05 | 6.11 | 2.11 | 5.72 | 5.07 | 6.88 | 8.79 | 3.57 | 6.02 | 5.51 | 4.69 | 9.35 | 6.07 | 1.72 |
| *Bambusa / pervariabilis* | 13.58 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Bambusa / polymorpha* | 10.37 | 10.32 | 4.21 | 9.82 | 5.48 | 1.89 | 5.11 | 4.48 | 6.17 | 7.11 | 3.2 | 5.23 | 4.76 | 4.11 | 8.34 | 5.55 | 1.76 |
| *Bambusa / textilis* | 14.61 | 11.87 | 5.12 | 11.54 | 5.98 | 1.97 | 5.67 | 4.9 | 6.99 | 8.26 | 3.25 | 6.18 | 5.38 | 4.4 | 8.8 | 5.79 | 1.7 |
| *Bambusa / tulda* | 10.92 | 10.54 | 4.23 | 9.69 | 5.61 | 1.92 | 5.1 | 4.44 | 6.13 | 8.15 | 3.27 | 5.44 | 4.76 | 4.37 | 8.47 | 5.76 | 1.7 |
| *Bambusa / tuldoides* | 14.34 | 11.25 | 4.96 | 9.42 | 5.93 | 2.09 | 5.86 | 4.91 | 6.76 | 8.61 | 3.6 | 5.76 | 5.37 | 4.53 | 9.07 | 6.07 | 1.74 |
| *Bambusa / ventricosa* | 11.09 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Bambusa / vulgaris* | 13.79 | 11.47 | 4.58 | 10.68 | 5.95 | 2.14 | 5.52 | 5.16 | 6.49 | 7.91 | 3.71 | 5.85 | 5.34 | 4.53 | 8.81 | 5.75 | 1.76 |
| *Bambusa / lako* | 10.54 | 8.76 | 3.74 | 8.19 | 4.61 | 1.63 | 4.44 | 3.87 | 5.3 | 6.65 | 2.66 | 4.48 | 4.36 | 3.39 | 6.9 | 4.51 | 1.44 |
| *Bambusa / chungii* | 13.7 | 10.94 | 4.42 | 10.11 | 5.75 | 1.89 | 5.19 | 4.6 | 6.33 | 7.08 | 3.21 | 5.53 | 4.72 | 4.31 | 8.55 | 5.62 | 1.64 |
| *Brachystachyum / densiflorum* | 14.51 | 11.13 | 4.47 | 10.78 | 5.61 | 1.78 | 5.55 | 4.66 | 6.35 | 6.5 | 2.83 | 6.17 | 5.18 | 4.11 | 8.34 | 5.24 | 1.37 |
| *Cephalostachyum / pergracile* | 13.6 | 10.64 | 4.68 | 9.18 | 5.61 | 1.96 | 5.68 | 4.59 | 6.51 | 7.12 | 3.22 | 5.61 | 4.99 | 4.33 | 8.49 | 5.63 | 1.72 |
| *Chimonobambusa / yunnanensis* | 9.33 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Dendrocalamus / argemica* | 14.7 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Dendrocalamus / asper* | 12.02 | 9.86 | 4.03 | 9.16 | 5.16 | 1.84 | 4.67 | 4.25 | 5.83 | 6.9 | 2.98 | 4.95 | 4.55 | 3.86 | 7.81 | 5.13 | 1.65 |
| *Dendrocalamus / barbatus* | 11.56 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Dendrocalamus / brandisii* | 13.34 | 12.33 | 4.86 | 11.67 | 6.41 | 2.29 | 6.17 | 5.41 | 7.23 | 8.04 | 3.89 | 6.32 | 5.74 | 4.99 | 9.78 | 6.44 | 1.97 |
| *Dendrocalamus / dumosus* | 12.63 | 12.24 | 4.86 | 10.99 | 6.29 | 2.22 | 6.05 | 5.18 | 6.99 | 8.34 | 3.64 | 6.37 | 5.59 | 4.96 | 9.62 | 6.38 | 2.02 |
| *Dendrocalamus / giganteus* | 13.56 | 11.87 | 4.75 | 11.07 | 6.18 | 2.08 | 5.64 | 5.1 | 6.9 | 8.63 | 3.69 | 5.97 | 5.33 | 4.65 | 9.35 | 6.13 | 1.97 |
| *Dendrocalamus / latiflorus* | 13.2 | 11.86 | 4.56 | 11.21 | 6.2 | 2.09 | 6.01 | 5.06 | 6.92 | 9.78 | 3.72 | 6.32 | 5.29 | 4.98 | 9.51 | 6.27 | 1.89 |
| *Dendrocalamus / maroochy* | 13.8 | 12.67 | 4.91 | 11.78 | 6.6 | 2.31 | 6.15 | 5.45 | 7.4 | 9.22 | 3.98 | 6.62 | 5.47 | 5.22 | 10.36 | 7.03 | 2.08 |
| *Dendrocalamus / membranaceus* | 12.89 | 11.12 | 4.62 | 9.89 | 5.95 | 2.09 | 5.46 | 4.73 | 6.49 | 6.98 | 3.47 | 5.63 | 5.24 | 4.42 | 9.02 | 6.01 | 1.82 |
| *Dendrocalamus / minor* | 13.65 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Dendrocalamus / peculiaris* | 16.17 | 13.77 | 5.48 | 13.2 | 7.33 | 2.53 | 6.82 | 5.99 | 8.08 | 10.11 | 4.48 | 7.14 | 6.12 | 5.67 | 11.27 | 7.4 | 2.31 |
| *Dendrocalamus / sikkimensis* | 9.57 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Dendrocalamus / strictus* | 11.69 | 12.77 | 5.38 | 11.67 | 6.7 | 2.39 | 6.79 | 5.5 | 7.61 | 8.14 | 4.09 | 6.66 | 6.22 | 5.3 | 10.27 | 6.79 | 2.12 |
| *Dendrocalamus /calostachyus* | 8.12 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Gigantochloa / atroviolacea*  | 15.53 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Gigantochloa / atter* | 10.48 | 9.33 | 3.62 | 8.53 | 4.95 | 1.63 | 4.37 | 3.92 | 5.63 | 6.92 | 2.77 | 4.92 | 4.15 | 3.85 | 7.43 | 4.92 | 1.46 |
| *Gigantochloa / bravisvagina* | 16.01 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Gigantochloa / longusvagina* | 13.89 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Gigantochloa / nigrociliata* | 16.3 | 14.61 | 5.98 | 13.67 | 7.69 | 2.82 | 7.44 | 6.4 | 8.58 | 10.62 | 4.88 | 7.48 | 6.96 | 5.91 | 11.91 | 7.88 | 2.62 |
| *Gigantochola / apus* | 12.62 | 9.98 | 4.02 | 9.05 | 5.23 | 1.89 | 4.89 | 4.28 | 5.87 | 7.34 | 3.05 | 5.19 | 4.82 | 4.06 | 7.96 | 5.27 | 1.64 |
| *Gigantochola /Albociliata*  | 15.74 | 13.98 | 5.35 | 13.57 | 7.37 | 2.72 | 7.16 | 6.06 | 8.21 | 10.01 | 4.52 | 7.53 | 6.94 | 6.01 | 11.45 | 7.63 | 2.36 |
| *Guadua / angustifolia* | 10.73 | 8.97 | 3.8 | 8.47 | 4.61 | 1.68 | 4.25 | 3.95 | 5.17 | 6.5 | 2.73 | 4.51 | 4.58 | 3.47 | 6.9 | 4.49 | 1.33 |
| *Guadua / aureocaulis* | 11.14 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Guadua / felix* | 14.47 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Himalayacalamus / porcatus* | 13.41 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Himalayacalamus / velutina* | 13.32 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Indocalamus / solidus* | 12.09 | 11.2 | 4.64 | 11.5 | 5.48 | 1.75 | 5.39 | 4.52 | 6.51 | 7.34 | 3 | 6.03 | 5.2 | 4.02 | 8 | 5.14 | 1.28 |
| *Indocalamus / tessellatus* | 9.64 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Melocanna / baccifera* | 13.92 | 12.17 | 5.2 | 10.39 | 6.15 | 2.21 | 6.26 | 5.13 | 7.32 | 8.04 | 3.73 | 6.31 | 5.62 | 4.86 | 9.39 | 6.29 | 2.02 |
| *Phyllosasa / tranquillans* | 10.09 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / angusta* | 13.16 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / arcana* | 13.17 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / aurea* | 12.75 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / aureosulcata* | 12.39 | 14.51 | 6.08 | 14.64 | 7.58 | 2.46 | 7.38 | 6.11 | 8.94 | 9.59 | 4.09 | 8.23 | 6.35 | 5.81 | 11.23 | 7.47 | 1.91 |
| *Phyllostachys / bambusoides* | 12.89 | 9.85 | 4.03 | 9.95 | 4.59 | 1.5 | 4.41 | 3.76 | 6 | 7.61 | 2.28 | 5.25 | 4.14 | 3.5 | 6.67 | 4.24 | 1.11 |
| *Phyllostachys / bissetii* | 13.38 | 13.5 | 5.49 | 13.11 | 6.49 | 2.09 | 6.23 | 5.32 | 8.26 | 9.96 | 3.41 | 7.18 | 5.83 | 4.92 | 9.38 | 6.08 | 1.5 |
| *Phyllostachys / dulcis* | 13.52 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / edulis* | 12.66 | 10.21 | 4.52 | 10.59 | 5.21 | 1.59 | 5.02 | 4.29 | 6.68 | 7.71 | 2.82 | 5.67 | 4.46 | 3.87 | 7.6 | 5.06 | 1.36 |
| *Phyllostachys / elegans* | 13.72 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / flexuosa* | 12.82 | 13.14 | 5.57 | 13.08 | 6.82 | 2.14 | 6.5 | 5.5 | 7.97 | 7.45 | 3.54 | 7.16 | 5.77 | 5.03 | 10 | 6.56 | 1.73 |
| *Phyllostachys / glauca* | 13.83 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / heteroclada* | 12.87 | 12.6 | 5.34 | 12.86 | 6.4 | 2.12 | 6.27 | 5.11 | 7.58 | 9.95 | 3.46 | 6.78 | 5.59 | 4.63 | 9.28 | 6.03 | 1.62 |
| *Phyllostachys / makinoi* | 12.37 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / manii* | 13.89 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / nigra* | 13.55 | 11.62 | 4.96 | 11.69 | 5.58 | 1.87 | 5.83 | 4.9 | 7.11 | 7.75 | 3.23 | 6.27 | 5.29 | 4.32 | 8.71 | 5.67 | 1.47 |
| *Phyllostachys / propinqua* | 16.33 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostachys / purpurata* | 13.77 | 9.97 | 4.46 | 10.69 | 4.99 | 1.56 | 4.92 | 4.13 | 6.36 | 6.38 | 2.59 | 5.57 | 4.4 | 3.78 | 7.22 | 4.63 | 1.32 |
| *Phyllostachys / rubromarginata* | 12.27 | 10.69 | 4.64 | 10.9 | 5.56 | 1.67 | 5.52 | 4.56 | 6.53 | 6.84 | 2.97 | 5.78 | 5.12 | 4 | 8.13 | 5.16 | 1.34 |
| *Phyllostachys / sulphurea* | 12.62 | 13.35 | 6.03 | 14.2 | 6.67 | 2.24 | 6.62 | 5.5 | 8.17 | 9.55 | 3.71 | 7.16 | 5.96 | 4.86 | 9.74 | 6.38 | 1.72 |
| *Phyllostachys / vivax* | 10.93 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyllostchys / meyeri* | 13.3 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Phyostachys / nidularia* | 12.85 | 9.09 | 4.25 | 9.34 | 4.64 | 1.38 | 4.34 | 3.77 | 5.63 | 6.9 | 2.44 | 4.78 | 4.06 | 3.18 | 6.55 | 4.12 | 1.19 |
| *Pleioblastus / distichus* | 12.21 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Pleioblastus / fortunei* | 11.31 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Pleioblastus / simonii* | 13.04 | 18.09 | 7.43 | 18.78 | 9.28 | 3.23 | 9.57 | 7.66 | 10.58 | 10.28 | 5.22 | 9.97 | 8.59 | 6.96 | 14.09 | 8.94 | 2.29 |
| *Pleioblastus / viridistriatus* | 13.97 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Pseudosasa / amabilis* | 10.09 | 9.57 | 4.08 | 9.74 | 4.93 | 1.52 | 4.96 | 4.1 | 5.77 | 6.16 | 2.63 | 5.14 | 4.86 | 3.43 | 7.17 | 4.47 | 1.16 |
| *Pseudosasa / cantorii* | 11.78 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Pseudosasa / japonica* | 9.94 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Sasa / palmata* | 11.28 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Sasa / senanensis* | 12.99 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Semiarundinaria / fastuosa* | 11.89 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Shibataea / chinensis* | 13.67 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Shibataea / kumasaca* | 12.6 | 9.54 | 4.21 | 9.86 | 4.96 | 1.52 | 4.81 | 4.1 | 5.71 | 5.62 | 2.54 | 5.04 | 4.6 | 3.43 | 7.25 | 4.46 | 1.31 |
| *Shibataea / lanceifolia* | 12.78 | 10.85 | 4.69 | 10.94 | 5.65 | 1.75 | 5.53 | 4.64 | 6.58 | 6.84 | 2.93 | 5.82 | 5.06 | 4.06 | 8.37 | 5.28 | 1.44 |
| *Sinobambusa / spp.* | 11.71 | 10.58 | 4.51 | 10.58 | 5.52 | 1.73 | 5.47 | 4.5 | 6.45 | 6.96 | 2.88 | 5.91 | 5.25 | 4.04 | 8.08 | 5.01 | 1.41 |
| *Thyrsostachys / oliveri* | 14.86 | 12.76 | 5.05 | 12.35 | 6.76 | 2.51 | 6.46 | 5.58 | 7.69 | 8.62 | 4.22 | 6.61 | 6.46 | 5.23 | 10.32 | 6.82 | 1.98 |
| *Thyrsostachys / siamensis* | 15.26 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| *Minimum* | 8.12 | 8.76 | 3.62 | 8.19 | 4.59 | 1.38 | 4.25 | 3.76 | 5.17 | 5.62 | 2.88 | 4.48 | 4.06 | 3.18 | 6.55 | 4.12 | 1.11 |
| *Maximum* | 16.33 | 18.09 | 7.43 | 18.78 | 9.28 | 3.23 | 9.57 | 7.66 | 10.58 | 10.62 | 5.22 | 9.97 | 8.59 | 6.96 | 14.09 | 8.94 | 2.62 |
| *Average* | 12.84 | 11.90 | 4.90 | 11.34 | 6.08 | 2.06 | 5.85 | 5.00 | 7.01 | 8.11 | 3.48 | 6.20 | 5.42 | 4.60 | 9.14 | 5.99 | 1.75 |
| *MSD* | 3.445 | 2.934 | 1.342 | 3.075 | 1.528 | 0.542 | 1.598 | 1.195 | 1.887 | 2.544 | 0.996 | 1.635 | 1.293 | 1.214 | 2.241 | 1.605 | 0.411 |

MSD, minimum significant difference. n/a, no data available.

**Table S2**

**Table S2. Comparison of Mineral Concentration among Different Species**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Genus / Species* | P | K | Ca | Mg | Fe | Mn | Zn | B | Al | S | Na | Cu |
| *Arundinaria / chino* | 1.99 | 9.13 | 5.23 | 1.57 | 76.67 | 432.67 | 31.27 | 7.9 | 64.07 | 1509.67 | 84.6 | 11.95 |
| *Arundinaria / hindsii* | 1.67 | 8.4 | 4.25 | 2.33 | 88.83 | 30 | 21.2 | 5.62 | 55.5 | 779.67 | 132.67 | 16.5 |
| *Arundinaria / oleosa* | 1.1 | 9.25 | 6.08 | 1.73 | 143.5 | 113.83 | 14.62 | 3.77 | 94 | 1341.83 | 92.5 | 5.65 |
| *Bambusa / balcooa* | 1.27 | 9.23 | 6.13 | 2.7 | 97.33 | 689.33 | 21.12 | 6.5 | 82.33 | 1280.83 | 108 | 4.37 |
| *Bambusa / bambos* | 1.58 | 8.61 | 5.11 | 1.79 | 141.5 | 221.5 | 18.91 | 6.38 | 91.08 | 1361.25 | 154.5 | 7.08 |
| *Bambusa / chungii* | 1.4 | 10.6 | 4.67 | 2.17 | 85.5 | 409.5 | 65.67 | 7.22 | 96.83 | 924 | 115.83 | 5.27 |
| *Bambusa / contracta* | 2.5 | 7.5 | 4.73 | 2.98 | 111.17 | 846.33 | 32.17 | 5.67 | 106.67 | 1043.67 | 140.33 | 5.3 |
| *Bambusa / dissimulator* | 1.01 | 5.74 | 3.98 | 1.74 | 83.31 | 72.37 | 16.02 | 5.22 | 72.37 | 1536.83 | 147.68 | 4.6 |
| *Bambusa / emeiensis* | 1.42 | 15.78 | 7.38 | 0.9 | 182.67 | 274 | 25.5 | 5.08 | 172.67 | 1540.67 | 170.33 | 6.2 |
| *Bambusa / gibba* | 1.73 | 8.25 | 6.42 | 1.4 | 101 | 961.17 | 43.33 | 5 | 63.83 | 2547.67 | 105.33 | 5.1 |
| *Bambusa / lako* | 2.13 | 6.69 | 5.57 | 3.55 | 103.07 | 386.68 | 21.82 | 4.83 | 82.84 | 1852 | 105.64 | 3.68 |
| *Bambusa / longispiculata* | 1.38 | 8.28 | 3.8 | 2.1 | 106.5 | 120.33 | 26.55 | 5.05 | 65.33 | 850 | 125.33 | 4.67 |
| *Bambusa / maculata* | 1.3 | 14.28 | 4.4 | 2 | 115.5 | 960.5 | 23 | 5.35 | 88.17 | 3538.83 | 99.67 | 5.07 |
| *Bambusa / multiplex* | 1.85 | 9.56 | 4.3 | 2.12 | 106.47 | 408.22 | 25.84 | 9.92 | 71.94 | 1517.89 | 94.82 | 12.96 |
| *Bambusa / oldhamii* | 1.24 | 8.44 | 3.96 | 2.39 | 85.59 | 477.21 | 21 | 5.88 | 72.04 | 1186.5 | 129.38 | 3.4 |
| *Bambusa / pervariabilis* | 1.59 | 9.55 | 5.95 | 1.58 | 102 | 313.17 | 24.17 | 6.53 | 91.13 | 1646.67 | 190 | 4.3 |
| *Bambusa / polymorpha* | 1.24 | 4.61 | 3.14 | 1.49 | 63.89 | 33.4 | 9.37 | 3.6 | 60.6 | 563.73 | 151.9 | 5.67 |
| *Bambusa / textilis* | 1.53 | 9.49 | 5.55 | 2.9 | 102.6 | 663.95 | 40.57 | 7.9 | 91.43 | 1365.55 | 206.37 | 10.24 |
| *Bambusa / tulda* | 1.28 | 6.18 | 3.61 | 1.38 | 94.49 | 46.82 | 17.96 | 4.39 | 60.15 | 758.37 | 131.33 | 4.07 |
| *Bambusa / tuldoides* | 0.93 | 7.82 | 6.77 | 1.98 | 96.25 | 437.17 | 32.97 | 9.18 | 62.75 | 1997.08 | 69.92 | 11.89 |
| *Bambusa / ventricosa* | 1.07 | 6.91 | 4.03 | 1.53 | 100.17 | 224 | 21.58 | 4.8 | 92.08 | 972.5 | 141.42 | 3.3 |
| *Bambusa / vulgaris* | 1.53 | 10.76 | 3.17 | 1.88 | 109.15 | 78.25 | 17.28 | 4.19 | 78.52 | 1896.17 | 102.12 | 4.04 |
| *Brachystachyum / densiflorum* | 1.58 | 11.78 | 9.2 | 1.95 | 140.33 | 612.58 | 43.5 | 8.38 | 69.33 | 1654.67 | 82.83 | 21.48 |
| *Cephalostachyum / pergracile* | 1 | 12 | 2.88 | 1.88 | 66 | 609 | 73 | 3.79 | 58.42 | 818.08 | 93.17 | 4.22 |
| *Chimonobambusa / yunnanensis* | 1.05 | 11.15 | 6.42 | 0.65 | 388.83 | 408.67 | 11.97 | 5 | 435.5 | 1163.67 | 198.33 | 2.47 |
| *Dendrocalamus membranaceus* | 1.71 | 14.01 | 4.43 | 1.7 | 132.42 | 167.58 | 29.62 | 3.12 | 159.16 | 1257.92 | 232.67 | 4.37 |
| *Dendrocalamus / argemica* | 1.17 | 16.95 | 2.6 | 1.87 | 105.83 | 250.33 | 17 | 3.68 | 97.67 | 2641.17 | 151.83 | 4.57 |
| *Dendrocalamus / asper* | 1.1 | 11.57 | 4.87 | 2.08 | 100.84 | 393.4 | 20.41 | 4.46 | 88.42 | 1386.78 | 111.42 | 5.32 |
| *Dendrocalamus / barbatus* | 0.95 | 15.08 | 5.3 | 2.1 | 161.84 | 276.5 | 34.83 | 5.47 | 196.33 | 1874.67 | 221.5 | 3.57 |
| *Dendrocalamus / brandisii* | 1.51 | 16.13 | 3.99 | 1.72 | 219 | 438.5 | 27 | 2.92 | 216 | 2994.83 | 121.5 | 4.17 |
| *Dendrocalamus / calostachyus* | 1.37 | 18.97 | 4.2 | 1.07 | 1376.3 | 378.17 | 16.8 | n/a | 1713.5 | 773.83 | 190.33 | 9.53 |
| *Dendrocalamus / dumosus* | 1.1 | 8.94 | 4.2 | 0.91 | 142.44 | 254.44 | 19.79 | 4.27 | 145.56 | 1928.11 | 130.89 | 4.77 |
| *Dendrocalamus / giganteus* | 1.42 | 12.9 | 3.65 | 2.4 | 86.33 | 417.33 | 27.67 | 4.47 | 63.83 | 1324 | 144.17 | 4.9 |
| *Dendrocalamus / latiflorus* | 1.35 | 10.05 | 5.1 | 2.2 | 226.92 | 429.5 | 28.38 | 3.73 | 224.58 | 1599.25 | 109.25 | 4.04 |
| *Dendrocalamus / maroochy* | 1 | 16.23 | 3.4 | 1.25 | 111.17 | 353.33 | 26 | 2.72 | 108.67 | 1714.17 | 153.83 | 4.9 |
| *Dendrocalamus / minor* | 2.07 | 7.5 | 8.43 | 1.97 | 99.67 | 631.5 | 15.83 | 8.42 | 82.83 | 2251.83 | 84 | n/a |
| *Dendrocalamus / peculiaris* | 1.5 | 10.95 | 4.68 | 2.13 | 98.5 | 243.5 | 33.5 | 5.88 | 82.83 | 1130.67 | 113.17 | 4.47 |
| *Dendrocalamus / sikkimensis* | 1.61 | 18.37 | 6.2 | 2.5 | 136.67 | 574 | 24.33 | 8 | 172.67 | 1594.67 | 239.67 | n/a |
| *Dendrocalamus / strictus* | 1.23 | 11.63 | 3.38 | 0.94 | 79.3 | 127.71 | 13.51 | 3.93 | 78.09 | 719.1 | 166.99 | 4.83 |
| *Gigantochloa / atroviolacea*  | 1.3 | 13.68 | 4.9 | 1.9 | 86.33 | 245.83 | 13.05 | 6 | 76.67 | 1349 | 131.33 | 4.6 |
| *Gigantochloa / atter* | 1.32 | 10.31 | 3.36 | 1.26 | 214.09 | 341.17 | 16.83 | 2.69 | 234.25 | 1078 | 171.83 | 5.63 |
| *Gigantochloa / bravisvagina* | 1.88 | 12.52 | 3.17 | 1.47 | 83.17 | 98.83 | 16.75 | 2.82 | 61.67 | 1180.17 | 163 | 3.83 |
| *Gigantochloa / longusvagina* | 1.4 | 12.68 | 2.72 | 1.58 | 97.83 | 134.33 | 27 | 2.73 | 67.5 | 1275.33 | 118.5 | 2.3 |
| *Gigantochloa / nigrocilata* | 1.07 | 14.25 | 3.47 | 0.9 | 111.5 | 179.67 | 38.33 | 2.33 | 95.67 | 1647 | 108.5 | 4.93 |
| *Gigantochola / albociliata*  | 1.43 | 8.73 | 4.07 | 2.1 | 121.83 | 172.67 | 34.33 | 5.32 | 107 | 1430.17 | 121.67 | 3.5 |
| *Gigantochola / apus* | 1.3 | 13.38 | 3.87 | 2.8 | 88.31 | 246.84 | 23.33 | 4.85 | 71.35 | 2403.33 | 118.92 | 3.21 |
| *Guadua / angustifolia* | 1.35 | 22.1 | 5.05 | 2.3 | 67.65 | 108 | 21.11 | 8.35 | 57.97 | 1923.83 | 246.43 | 5.7 |
| *Guadua / aureocaulis* | 1.07 | 16.2 | 4.82 | 3.65 | 150 | 149.17 | 14.5 | 8.87 | 154 | 2382.5 | 219 | n/a |
| *Guadua / felix* | 1.32 | 18.85 | 3.88 | 0.95 | 116.5 | 163.83 | 36.83 | 4.18 | 122.67 | 2311.83 | 99.67 | 3.17 |
| *Himalayacalamus / porcatus* | 1.52 | 7.67 | 3.3 | 1 | 91.5 | 307.67 | 25.67 | 5.17 | 93.5 | 1267.67 | 96.83 | 3.97 |
| *Himalayacalamus / velutina* | 1.6 | 12.35 | 4.71 | 3.18 | 96.25 | 311.09 | 45.58 | 6.01 | 88.5 | 2394.59 | 110.67 | 7.33 |
| *Indocalamus / solidus* | 1.32 | 12.03 | 5.13 | 0.97 | 98 | 821.25 | 28.67 | 9.03 | 85.17 | 1785.17 | 80.33 | 12.98 |
| *Indocalamus / tessellatus* | 1.4 | 13.78 | 2.8 | 0.8 | 63.5 | 315.67 | 36.17 | 8.73 | 42 | 1565.83 | 58.33 | 18.89 |
| *Melocanna / baccifera* | 1.36 | 11.13 | 4.68 | 2.7 | 96 | 40 | 23.83 | 7.67 | 53.83 | 1072.67 | 120.33 | 4 |
| *Phyllosasa / tranquillans* | 1.27 | 12.9 | 7.5 | 1.23 | 70.5 | 494.67 | 19.5 | 8.78 | 58.67 | 1114.5 | 77.67 | 10.65 |
| *Phyllostachys / angusta* | 1.05 | 10.45 | 9.48 | 2.01 | 144.5 | 598 | 32.5 | 12.23 | 108.08 | 1617 | 102.58 | 12.96 |
| *Phyllostachys / arcana* | 1.71 | 11.9 | 9.52 | 1.76 | 267.83 | 761.08 | 56.17 | 12.23 | 85.17 | 1432.33 | 98.17 | 15.29 |
| *Phyllostachys / aurea* | 1.2 | 10.67 | 4.67 | 1.2 | 142.39 | 362.78 | 23.49 | 8.74 | 85.89 | 1591.5 | 110.83 | 11.56 |
| *Phyllostachys / aureosulcata* | 1.15 | 10.86 | 9.4 | 1.83 | 149.49 | 522.39 | 34.55 | 10.97 | 86.18 | 1666.06 | 89.15 | 15 |
| *Phyllostachys / bambusoides* | 1.1 | 10.63 | 7.09 | 1.53 | 133.84 | 565.44 | 29.18 | 10.28 | 71.56 | 1207.42 | 94.19 | 12.18 |
| *Phyllostachys / bissetii* | 1.3 | 11.47 | 7.43 | 1.78 | 120.93 | 274.8 | 29.13 | 9.13 | 80.73 | 1732.13 | 94.73 | 15.67 |
| *Phyllostachys / dulcis* | 1.96 | 16.23 | 5.66 | 1.75 | 141.33 | 251.25 | 27.42 | 7.84 | 101.08 | 1373.58 | 133.83 | 12.42 |
| *Phyllostachys / edulis* | 1.27 | 14.3 | 5.54 | 1.34 | 95.08 | 902.83 | 27.89 | 12.64 | 107.33 | 1516.5 | 72.17 | 16.06 |
| *Phyllostachys / elegans* | 1.25 | 10.93 | 4.84 | 1.26 | 126.44 | 214.89 | 18.89 | 8.64 | 65.5 | 1457.22 | 125.33 | 11.36 |
| *Phyllostachys / flexuosa* | 0.95 | 10.02 | 7.38 | 1.62 | 141.63 | 567.17 | 27.95 | 9.55 | 89.04 | 1199.75 | 121 | 16.33 |
| *Phyllostachys / glauca* | 1.55 | 11.37 | 6.17 | 1.33 | 116 | 164.67 | 18.83 | 5.62 | 90.17 | 1322.22 | 133.67 | 15.93 |
| *Phyllostachys / heteroclada* | 1.35 | 10.48 | 6.48 | 1.63 | 110.83 | 774.16 | 35.83 | 11.25 | 72.17 | 1182.67 | 56.17 | 15.67 |
| *Phyllostachys / makinoi* | 1.15 | 11.36 | 4.16 | 0.95 | 103.83 | 357.92 | 18 | 9.28 | 76.42 | 1414.67 | 103.44 | 17.15 |
| *Phyllostachys / manii* | 1.41 | 12.09 | 4.51 | 2.3 | 100.92 | 240.67 | 19.29 | 8.49 | 70.75 | 1525.17 | 122 | 14.48 |
| *Phyllostachys / meyeri* | 1.73 | 10.12 | 9.1 | 2.41 | 304.92 | 472.92 | 49.26 | 14.11 | 96.25 | 2423 | 96 | 15.46 |
| *Phyllostachys / nidularia* | 4.5 | 12.45 | 4.55 | 1.67 | 118.85 | 329.38 | 35.05 | 8.36 | 75.91 | 1759.23 | 103.46 | 12.23 |
| *Phyllostachys / propinqua* | 1.3 | 10.6 | 5.42 | 2.17 | 97 | 60.17 | 18.2 | 6.6 | 62.67 | 1548.33 | 134 | 13.8 |
| *Phyllostachys / purpurata* | 1.13 | 10.71 | 4.94 | 1.57 | 123.27 | 332.02 | 30.06 | 8.94 | 70.64 | 1276.75 | 87.09 | 13.62 |
| *Phyllostachys / rubromarginata* | 1 | 9.1 | 4.48 | 1.43 | 117.59 | 154.48 | 23.36 | 7.45 | 92.41 | 1269.82 | 100.52 | 11.61 |
| *Phyllostachys / sulphurea* | 1.94 | 14.11 | 5.43 | 1.23 | 110.97 | 409.29 | 18.21 | 9.62 | 74.67 | 1829.03 | 107.33 | 14.92 |
| *Phyllostachys / vivax* | 0.85 | 15.07 | 6.07 | 0.56 | 82.33 | 613 | 24 | 11.87 | 47.5 | 2050.67 | 128.33 | 11.13 |
| *Phyllostachys nigra* | 1.38 | 11.99 | 6.02 | 1.66 | 138.78 | 842.08 | 25.28 | 7.84 | 80.31 | 1248.61 | 107.83 | 28.66 |
| *Pleioblastus / distichus* | 1.72 | 8.6 | 6.58 | 3.58 | 74.33 | 173.5 | 65.33 | 6.85 | 49.5 | 1683 | 238.33 | 10.9 |
| *Pleioblastus / fortunei* | 1.2 | 14.25 | 3.82 | 0.93 | 79.33 | 653.67 | 27.83 | 13.82 | 78.83 | 925.67 | 60.33 | 12.5 |
| *Pleioblastus / simonii* | 1.36 | 8.14 | 6.37 | 2.14 | 70.89 | 487.78 | 19.11 | 4.57 | 44.89 | 1360.56 | 98.89 | 9.51 |
| *Pleioblastus / viridistriatus* | 1.32 | 7.23 | 4.27 | 1.9 | 279.33 | 17.67 | 16 | 5.5 | 241.33 | 1078 | 119 | 15.4 |
| *Pseudosasa / amabilis* | 1.63 | 8.97 | 3.7 | 0.38 | 52.44 | 593.22 | 33.56 | 6.4 | 44.33 | 1385.56 | 64.22 | 13.03 |
| *Pseudosasa / cantorii* | 1.65 | 10.2 | 7.7 | 1.46 | 93.91 | 531.18 | 22.13 | 7.82 | 80.45 | 1545 | 127 | 12.99 |
| *Pseudosasa / japonica* | 1.54 | 8.45 | 4.38 | 2.68 | 76.92 | 458.38 | 29.67 | 7.81 | 56.42 | 1126.58 | 100.46 | 11.29 |
| *Sasa / palmata* | 1.07 | 4.37 | 2.8 | 1.21 | 73.17 | 444.5 | 35 | 5.07 | 73.17 | 1170.17 | 122.17 | 11.68 |
| *Sasa / senanensis* | 1.17 | 14.56 | 6.75 | 1.68 | 92.83 | 1087 | 58.5 | 11.12 | 86.67 | 2206.5 | 65.67 | 19.17 |
| *Semiarundinaria / fastuosa* | 1.9 | 11.69 | 7.75 | 2.06 | 89.75 | 260.67 | 24.74 | 5.24 | 64.58 | 1594.08 | 188.33 | 18.75 |
| *Shibataea / chinensis* | 1 | 20.08 | 3.32 | 1.32 | 79.83 | 192.67 | 64.83 | 9.75 | 54.67 | 2303.5 | 71.33 | 19.67 |
| *Shibataea / kumasaca* | 1.2 | 12.78 | 3.85 | 1.24 | 92.08 | 56.09 | 41.32 | 8.74 | 88.33 | 1504.83 | 105.67 | 10.81 |
| *Shibataea / lanceifolia* | 1 | 18.66 | 2.83 | 1.09 | 73.75 | 95.17 | 53.75 | 11.71 | 52.67 | 1638.08 | 61.5 | 20.42 |
| *Sinobambusa / spp.* | 1.58 | 12.32 | 5.89 | 1.28 | 84.31 | 401.36 | 22.2 | 6.24 | 63.24 | 1486.87 | 84.55 | 10.94 |
| *Thyrsostachys / oliveri* | 1.28 | 15.43 | 3.77 | 1.25 | 109.33 | 224.33 | 53.33 | 3.93 | 79.67 | 2444.33 | 89.83 | 3.83 |
| *Thyrsostachys / siamensis* | 1.69 | 16.6 | 2.27 | 1.4 | 130.33 | 104 | 22 | 4.8 | 148.67 | 1032.67 | 119.33 | 6.97 |
| *Minimum* | 0.85 | 4.37 | 2.27 | 0.38 | 52.44 | 17.67 | 9.37 | 2.33 | 42.0 | 563.7 | 56.17 | 2.30 |
| *Maximum* | 4.50 | 22.1 | 9.52 | 3.65 | 1376.3 | 1087.0 | 73.00 | 14.11 | 1713.5 | 3583.8 | 246.43 | 28.66 |
| *Average* | 1.42 | 11.57 | 5.12 | 1.76 | 130.8 | 373.3 | 28.77 | 6.90 | 111.2 | 1544.8 | 122.9 | 9.57 |
| *MSD* | 0.746 | 11.36 | 6.455 | 1.310 | 127.65 | 544.56 | 41.292 | 8.097 | 70.836 | 952.46 | 100.57 | 14.91 |

MSD, minimum significant difference. n/a, no data available.