

## Supplementary data 2

### Supplementary Table:

Detailed overview of the documented taxonomic distribution of the four different types of ribosome inactivating proteins within the Magnoliophyta (flowering plants).

#### BASAL MAGNOLIOPHYTA

No sequences found (e.g. in the transcriptome of *Amborella trichopoda*, *Illicium parviflorum*)

#### CERATOPHYLLALES

No sequences

#### MAGNOLIIDS

##### Laurales

Lauraceae: *Cinnamomum camphora* AB\*

#### EUDICOTYLEDONS

##### STEM EUDICOTYLEDONS

##### Ranunculales

Ranunculaceae: *Adonis aestivalis* AB; *Eranthis hyemalis* AB

##### CORE EUDICOTYLEDONS

##### Asterids

##### ***Campanulids; Apiales***

Araliaceae: *Panax ginseng* AB

Apiaceae: *Bupleurum chinense*: most probably A (sequence incomplete at C-terminus)

##### ***Campanulids; Asterales***

Asteraceae: *Helianthus tuberosus* AB; *Centaurea* sp. AB; *Artemisia annua* AB

##### ***Campanulids; Dipsacales***

Adoxaceae: *Sambucus* sp. AB and B

##### ***Ericales***

Actinidiaceae: *Actinidia deliciosa* A and AB

Ebenaceae: *Diospyros kaki* A (most probably)

Polemoniaceae: *Ipomopsis aggregata* AB

Theaceae: *Camellia sinensis* A and AB

##### ***Lamiids***

Lamiaceae: *Clerodendrum* sp. A

## Caryophyllales

Aizoaceae: *Mesembryanthemum crystallinum* A

Amaranthaceae: *Amarantus viridis* A; *Atriplex patens* A; *Beta vulgaris* A; *Chenopodium album* A;  
*Spinacia oleracea* A

Caryophyllaceae: *Dianthus* sp. A; *Saponaria officinalis* A; *Silene latifolia* A

Nyctaginaceae: *Bougainvillea* sp. A; *Mirabilis* sp. A

Phytolaccaceae: *Phytolacca* sp. A

## Santalales

Loranthaceae: *Viscum album* AB; *Viscum articulatum* AB

Olacaceae: *Ximenia americana* AB

## Vitales

Vitaceae: no sequences in the genome of *Vitis vinifera*

## Rosids

### Eurosids I

#### **Cucurbitales**

Cucurbitaceae: *Bryonia dioica* A and AB; *Cucumis* sp. A and B; *Cucurbita* sp. A; *Gynostemma pentaphyllum* A; *Luffa cylindrica* A; *Momordica charantia* A and AB; *Trichosanthes kirilowii* A and AB

#### **Fabales**

Fabaceae: *Abrus* sp. AB; no sequence in the genome of *Glycine max* and *Medicago truncatula*

#### **Malpighiales**

Euphorbiaceae: *Ricinus communis* A and AB; *Euphorbia* sp. A and B; *Jatropha curcas* A; *Gelonium multiflorum* A

Passifloraceae: *Adenia volkensis* AB

Salicaceae (willow family): *Populus trichocarpa* A and B

#### **Rosales**

Cannabaceae: *Humulus lupulus* A

Rosaceae (rose family): *Malus domestica* A and AB; *Prunus* sp. A

### Eurosids II

#### **Brassicales:**

Brassicaceae; no sequences in the genome of *Arabidopsis thaliana*

Caricaceae; no sequences in the genome of *Carica papaya*

#### **Malvales:**

Malvaceae (mallow family): *Gossypium* sp. AB

#### **Sapindales:**

Sapindaceae (soapberry family) *Paullinia cupana* AB

## LILIOPSIDA

### ASPARAGALES

- Agavaceae (agave family): *Yucca filamentosa* A (partial sequence)  
Asparagaceae (asparagus family): *Asparagus officinalis* A  
Hyacinthaceae (hyacinth family): *Charybdis maritima* A; *Drimiopsis kirkii* A; *Hyacinthus orientalis* A;  
*Muscari armeniacum* A  
Iridaceae (iris family): *Iris* sp. AB and A  
Ruscaceae (lily-of-the-valley family): *Polygonatum multiflorum* AB and *Ophiogon japonicus* A

### COMMELINIDS

#### Arecales

- Arecaceae: *Elaeis guineensis* AB

#### Poales

- Bromeliaceae: *Ananas comosus* A (incomplete sequence)  
Poaceae (grass family):  
BEP clade (Bambusoideae, Ehrhartoideae and Pooideae)  
    Bambusoideae  
        Bambuseae : *Phyllostachys edulis* A  
    Ehrhartoideae  
        Oryzeae: *Oryza sativa* A and AD  
    Pooideae  
        Aveneae  
            *Agrostis capillaris* A  
            *Avena barbata* A and AC  
        Brachypodieae  
            *Brachypodium distachyon* A and AD  
        Poeae  
            *Festuca arundinacea* and *F. pratensis* A  
        Triticeae  
            *Aegilops speltoides* A  
            *Hordeum vulgare* A and AC  
            *Leymus cinereus* x *Leymus triticoides* A and probably AC  
            *Pseudoroegneria spicata* A  
            *Secale cereale* A  
            *Triticum aestivum* A and AB  
PACCAD clade (Panicoideae, Aristidoideae, Centothecoideae, Chloridoideae, Arundinoideae, Danthonioideae)  
    Panicoideae  
        Andropogoneae  
            *Saccharum officinarum* A and AB  
            *Sorghum bicolor* A and AB  
            *Zea mays* A, AB and AC  
        Paniceae  
            *Panicum virgatum* AB and A

\* indicates the type of RIP/lectin found in this species; see Supplementary data 1