

Article

Evaluation of potential volatile allelopathic plants from Bangladesh: *Sapindus mukorossi*, as candidate species

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Table S1. The radicle and hypocotyl elongation percentage of *L. sativa* seedlings in the DP method containing 200 mg of dry plant materials (103 plant samples).

Family	Site Code	Botanical name	Plant Part	Elongation Status			
				41 mm wells			
				R%	Score	H%	Score
Sapindaceae	LM	<i>Sapindus mukorossi</i>	Fruit	3.00	** ** *	59.5	**
Fabaceae	DNBG	<i>Cassia nodosa</i>	Leaf	34.4	** ** *	76.7	
Zingiberaceae	LM	<i>Kaempferia galanga</i>	Root	43.4	** **	46.0	** *
Acanthaceae	CU	<i>Justicia adhatoda</i>	Leaf	52.1	** *	74.6	
Piperaceae	DNBG	<i>Piper longum</i>	Fruit	53.5	** *	61.6	*
Apiaceae	SAU	<i>Cuminum cyminum</i>	Seed	56.1	**	90.5	
Apocynaceae	DNBG	<i>Tabernaemontana dichotoma</i>	Flower	58.6	**	44.6	** **
Myristicaceae	DNBG	<i>Myristica fragranca</i>	Leaf	59.6	**	82.2	
Asteraceae	SAU	<i>Tagetes erecta</i>	Flower	59.7	**	44.9	** **
Commelinaceae	SAU	<i>Commelina benghalensis</i>	Leaf	59.8	**	77.5	
Euphorbiaceae	BAU	<i>Euphorbia neriifolia</i>	Leaf	60.3	**	86.4	
Lecythidaceae	SAU	<i>Couropita guianensis</i>	Fruit	61.4	**	69.6	
Anacardiaceae	LM	<i>Mangifera indica</i>	Seed	62.0	**	51.4	** *
Sapindaceae	JU	<i>Lepisanthes rubiginosa</i>	Leaf	62.8	*	91.3	
Combretaceae	DNBG	<i>Terminalia chebula</i>	Leaf	63.1	*	45.8	** *
Asteraceae	SAU	<i>Helianthus annuus</i>	Leaf	63.2	*	56.5	**
Lamiaceae	CU	<i>Gmelina arborea</i>	Bark	63.7	*	81.0	
Malvaceae	DNBG	<i>Sida cordifolia</i>	Leaf	64.4	*	50.8	** *
Apiaceae	JU	<i>Cordia dichotoma</i>	Leaf	65.9	*	45.6	** *
Rubiaceae	DNBG	<i>Mitragyna parvifolia</i>	Leaf	65.9	*	80.8	
Lamiaceae	LM	<i>Ocimum sanctum</i>	Leaf	66.4	*	85.8	

Family	Site Code	Botanical name	Plant Part	Elongation Status			
				41 mm wells			
				R%	Score	H%	Score
Asteraceae	DNBG	<i>Wedelia chinensis</i>	Leaf	67.2	*	69.1	
Apocynaceae	SAU	<i>Nerium oleander</i>	Leaf	67.4	*	57.4	**
Cucurbitaceae	SAU	<i>Cucumis sativa</i>	Peel	67.8	*	76.9	
Acanthaceae	BAU	<i>Hygrophila schulli</i>	Leaf	68.0	*	75.2	
Asteraceae	DNBG	<i>Tagetes erecta</i>	Leaf	69.0	*	61.5	*
Rubiaceae	BAU	<i>Paederia foetida</i>	Leaf	69.8		65.0	*
Asteraceae	CU	<i>Artemisia nilagirica</i>	Leaf	70.2		61.6	*
Apocynaceae	DNBG	<i>Holarrhena pubescens</i>	Leaf	70.2		67.8	*
Lamiaceae	DNBG	<i>Premna latifolia</i>	Leaf	70.7		75.5	
Meliaceae	DNBG	<i>Azadirachta indica</i>	Leaf	72.7		78.2	
Fabaceae	DNBG	<i>Senna siamea</i>	Leaf	72.9		71.3	
Rubiaceae	CU	<i>Citrus medica</i>	Leaf	73.7		72.4	
Asteraceae	CU	<i>Bidens pilosa</i>	Leaf	73.9		84.8	
Asteraceae	JU	<i>Eupatorium triplinerve</i>	Leaf	74.5		72.1	
Oleaceae	SAU	<i>Jasminum scandes</i>	Leaf	75.3		85.4	
Aplaceae	BAU	<i>Foeniculum vulgare</i>	Seed	75.9		87.8	
Rhamnaceae	DNBG	<i>Ziziphus mauritiana</i>	Leaf	76.1		80.6	
Theaceae	JU	<i>Camellia sinensis</i>	Leaf	76.4		72.5	
Combretaceae	DNBG	<i>Terminalia belerica</i>	Leaf	76.4		82.5	
Lecythidaceae	CU	<i>Careya arborea</i>	Leaf	76.6		81.0	
Euphorbiaceae	CU	<i>Macaranga tanarius</i>	Leaf	76.6		66.1	*
Fabaceae	JU	<i>Pisum sativum</i>	Peel	76.8		75.3	
Rubiaceae	CU	<i>Morinda citrifolia</i>	Leaf	76.9		72.6	
Commelinaceae	DNBG	<i>Commelina diffusa</i>	Leaf	77.0		106	
Acanthaceae	JU	<i>Adhatoda vasica</i>	Leaf	77.3		79.2	
Achariaceae	SAU	<i>Hydnocarpus kurzii</i>	Leaf	77.5		67.6	*
Rutaceae	DNBG	<i>Zanthoxylum rhetsa</i>	Leaf	77.7		86.7	
Lamiaceae	DNBG	<i>Tectona grandis</i>	Leaf	77.8		83.5	
Euphorbiaceae	CU	<i>Manihot esculenta</i>	Leaf	78.4		75.1	
Cucurbitaceae	CU	<i>Coccinia grandis</i>	Leaf	78.6		73.6	
Euphorbiaceae	CU	<i>Cnesmone javanica</i>	Leaf	79.1		88.1	
Euphorbiaceae	JU	<i>Croton roxburghii</i>	Leaf	79.1		84.5	
Piperaceae	DNBG	<i>Piper nigrum</i>	Fruit	79.2		67.5	*
Cucurbitaceae	SAU	<i>Cucurbita moschata</i>	Leaf	79.3		83.1	
Piperaceae	DNBG	<i>Piper chaba</i>	Leaf	79.4		71.9	
Zingiberaceae	CU	<i>Curcuma roxburghii</i>	Leaf	80.1		90.1	
Amaranthaceae	JU	<i>Alternanthera philoxeroides</i>	Leaf	80.5		70.7	
Lamiaceae	CU	<i>Clerodendrum infortunatum</i>	Leaf	80.5		73.6	
Rubiaceae	DNBG	<i>Glycosmis pentaphylla</i>	Leaf	80.7		73.0	
Euphorbiaceae	CU	<i>Euphorbia tirucalli</i>	Leaf	80.8		89.9	
Sapotaceae	SAU	<i>Chrysophyllum cainita</i>	Leaf	80.9		73.7	
Plumbaginaceae	SAU	<i>Aegialitis rotundifolia</i>	Leaf	81.0		82.9	
Apiaceae	SAU	<i>Centella asiatica</i>	Leaf	81.1		72.8	
Verbenaceae	BAU	<i>Clerodendrum indicum</i>	Leaf	81.4		73.0	
Fabaceae	DNBG	<i>Dalbergia Sissoo</i>	Leaf	81.6		61.5	*
Ebenaceae	DNBG	<i>Diospyros montana</i>	Leaf	81.7		66.2	*
Lecythidaceae	SAU	<i>Couroupita guianensis</i>	Flower	82.0		83.4	
Apocynaceae	DNBG	<i>Rauwolfia serpentina</i>	Leaf	82.0		79.1	
Fabaceae	DNBG	<i>Senna alata</i>	Leaf	82.3		63.0	*
Scrophulariaceae	SAU	<i>Limnophila repens</i>	Leaf	82.9		92.2	
Cucurbitaceae	DNBG	<i>Gynostemma pentaphyllum</i>	Leaf	83.6		156	
Caesalpiniaceae	DNBG	<i>Cassia renigera</i>	Leaf	83.7		95.8	
Meliaceae	LM	<i>Chukrasia tabularis</i>	Leaf	84.1		100	

Family	Site Code	Botanical name	Plant Part	Elongation Status			
				41 mm wells			
				R%	Score	H%	Score
Lamiaceae	LM	<i>Hyptis suaveolens</i>	Seed	84.2		79.8	
Rubiaceae	DNBG	<i>Haldina cordifolia</i>	Leaf	84.4		75.0	
Malvaceae	DNBG	<i>Heritiera fomes</i>	Leaf	84.5		61.9	*
Mimosaceae	DNBG	<i>Entada rheedei</i>	Fruit	84.5		66.2	*
Rutaceae	CU	<i>Clausena heptaphylla</i>	Leaf	84.6		71.3	
Phyllanthaceae	LM	<i>Phyllanthus niruri</i>	Leaf	84.8		84.5	
Sapotaceae	DNBG	<i>Mahua longifolia</i>	Flower	85.0		83.6	
Acanthaceae	DNBG	<i>Andrographis paniculata</i>	Leaf	85.1		80.5	
Burseraceae	CU	<i>Canarium resiniferum</i>	Leaf	85.5		70.5	
Malvaceae	DNBG	<i>Bombax insigne</i>	Leaf	86.0		104	
Phyllanthaceae	DNBG	<i>Phyllanthus emblica</i>	Fruit	86.0		83.5	
Asteraceae	JU	<i>Spilanthes cliata</i>	Leaf	86.3		70.6	
Lamiaceae	CU	<i>Vitex trifolia</i>	Leaf	86.4		102	
Flacourtiaceae	DNBG	<i>Flacourtia jangomas</i>	Leaf	86.6		74.1	
Lamiaceae	CU	<i>Ocimum gratissimum</i>	Leaf	87.2		99.1	
Onagraceae	DNBG	<i>Ludwigia octovalvis</i>	Leaf	87.5		70.9	
Caricaceae	SAU	<i>Carica papaya</i>	Leaf	88.2		74.5	
Fabaceae	DNBG	<i>Indigofera tinctoria</i>	Leaf	88.4		71.2	
Orchidaceae	LM	<i>Geodorum densiflorum</i>	Leaf	88.9		94.4	
Fabaceae	CU	<i>Mucuna pruriens</i>	Leaf	89.4		65.1	*
Rutaceae	SAU	<i>Melicope triphylla</i>	Leaf	89.9		81.3	
Burseraceae	DNBG	<i>Protium serratum</i>	Leaf	90.5		67.7	*
Malvaceae	DNBG	<i>Sida acuta</i>	Leaf	90.7		82.9	
Sapindaceae	DNBG	<i>Dodonaea viscosa</i>	Leaf	91.9		97.5	
Fumariaceae	CU	<i>Fumaria indica</i>	Leaf	93.4		114	
Verbenaceae	SAU	<i>Vitex negundo</i>	Leaf	94.6		88.7	
Moraceae	DNBG	<i>Psidium guajava</i>	Leaf	94.8		74.1	
Verbenaceae	DNBG	<i>Duranta repens</i>	Leaf	95.6		76.1	
	SAU	<i>Coldenia procumbens</i>	Leaf	100		112	

* Score indicates the strength of elongation of the tested plant samples on the radicle of the *L. sativa* (control plant) by the standard deviation variance (SDV), where: * = $M - 0.5 \times SD$, ** = $M - 1 \times SD$, *** = $M - 1.5 \times SD$, **** = $M - 2 \times SD$, ***** = $M - 3 \times SD$ which refer to radicle elongation shorter than the mean value. Each additional * indicates a stronger level of growth control. M= Mean of radicle elongation, SD = Standard deviation of length tested *L. sativa* radicle, R%= Radicle elongation percentage, H%= Hypocotyl elongation percentage.

* Site codes indicate the areas of sample collection. Abbreviations: DNBG – Dhaka National Botanic Garden, Dhaka, SAU – Sher-e-Bangla Agriculture University, Dhaka, BAU – Bangladesh Agriculture University, Mymensingh, CU – Chittagong University, Chittagong, JU – Jahangirnagar University, Savar, Dhaka, LM – Local Market, Dhaka



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