

11 New Species from Bangladesh

Zinia Nasrin Shumon^{1*}, Miraz Rahman Zarif²

¹PhD Candidate, Bangladesh University of Professionals, Dhaka, Bangladesh

²Officer Cadet, Bangladesh Military Academy. Botanical Illustrator and collector

Corresponding author*

DOI: <https://doi.org/10.51584/IJRIAS.2026.11090046>

Received: 21 August 2026; Accepted: 09 September 2026; Published: 08 October 2026

1. *Acalypha indica* var. *variegata* Zinia & S.A. Jahan
2. *Acmella ciliata* var. *tricolor* Begum Rokeya & Zinia
3. *Acmella uliginosa* var. *variegata* Begum Rokeya & Zinia.
4. *Ageratum variegata* Sumon & Liton (RDA)
5. *Aphanamixis polystachya* var. *mahasthan* Zinia (Pundra)
6. *Campanula dimorphantha* var. *purpurea* Miraz (RCC)
7. *Dischidia bengalensis* var. *linifolia* Zinia & S.A. Jahan
8. *Justicia subrufa* Begum Rokeya & Zinia
9. *Mycetia nigra* Shumon and Zarif
10. *Oplismenus burmanni* var. *rubra* Shumon & Syeda Aseefa Khatun
11. *Rostellularia procumbens* var. *purpurea* Zinia

1. *Acalypha indica* var. *variegata* Zinia & S.A. Jahan

ABSTRACT

Acalypha indica var. *variegata* Zinia & S.A. Jahan described and illustrated (Fig-1,2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from *Euphorbiaceae* family. First published in First published in Sp. Pl.: 1003 (1753). This new species differs from *Acalypha indica* L. with variegated leaves.

Keywords: *Euphorbiaceae*, New species, Bangladesh.

INTRODUCTION

Acalypha L. First published in Sp. Pl.: 1003 (1753). Includes 429 Accepted Species. *Euphorbiaceae* family, First published in Gen. Pl. [Jussieu] 384. 1789 [4 Aug 1789] (1789) nom. cons.

English name – Variegated Copper leaf. Jahan's Copper leaf

Bengali name – জিনিয়ার মুক্তাবুরি / জাহানের মুক্তাবুরি

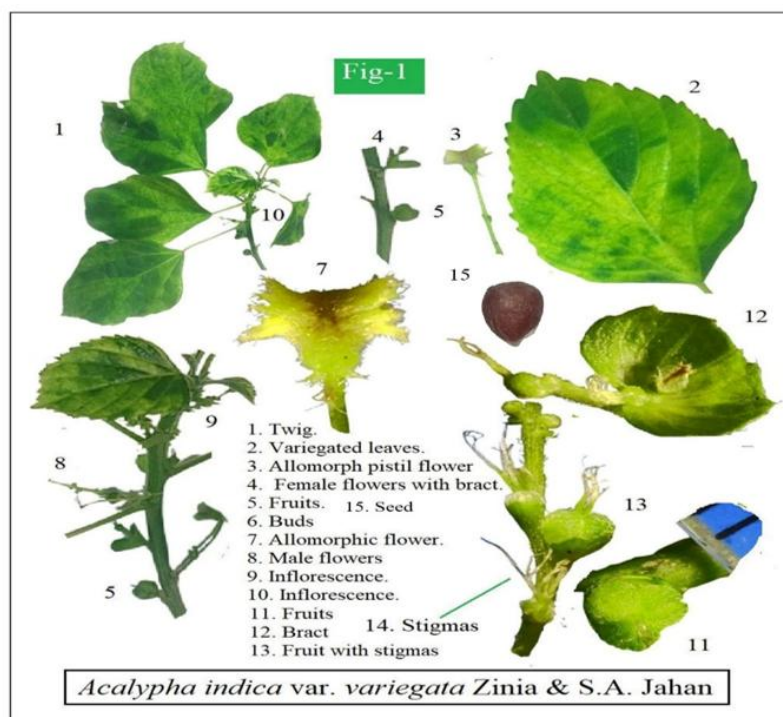
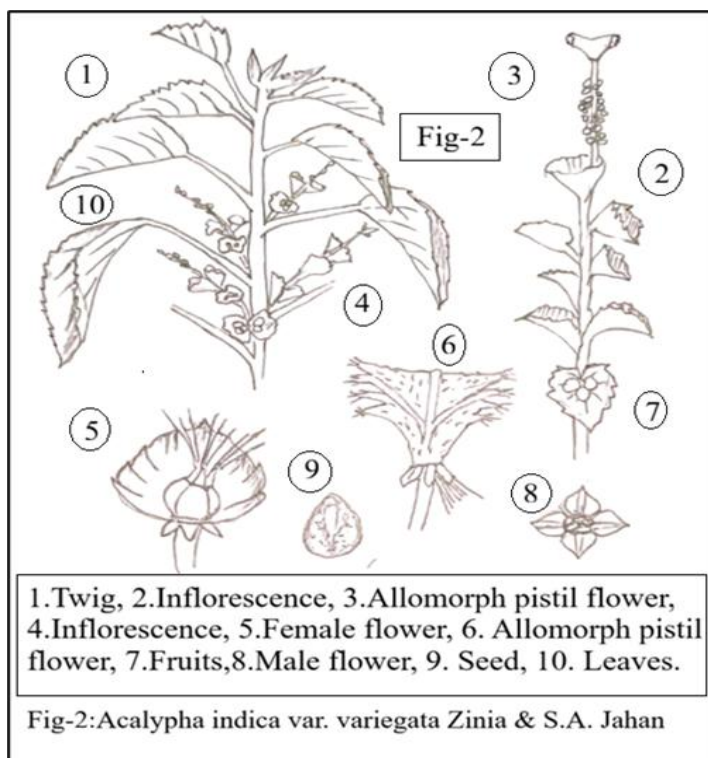


Fig-1: *Acalypha indica* var. *variegata* Zinia & S.A. Jahan.



Description: Habit: Erect, often branched, up to 1 meter high, covered in fine, curved hairs (pubescent). Leaves are variegated, simple, alternate, ovate to rhombic-ovate, 2-7 cm long, with serrated margins and distinct petioles (leaf stalks). Monoecious (male and female flowers on the same plant) in axillary spikes. Female Flowers: Located at the base of the spike, enclosed in large, cup-like, leafy bracts (involucres) with crenulate (scalloped) edges, containing 3 small sepals and a pilose ovary. Male Flowers: At the tip of the spike, with 4 sepals and 8 stamens, lacking the bracts. Allomorphic female flowers greenish yellow with red tinge. Fruit: A small, 3-lobed (trilobate) capsule that splits open when mature. Seeds are ovoid, about 1.5 mm long.

Taxonomic treatment

Acalypha indica var. *variegata* Zinia & S.A. Jahan, nov. p-4, Fig-1, Fig-2

TYPE: Bangladesh. RDA Campus, Bogura district (24.8526° N, 89.3730° E).

Etymology

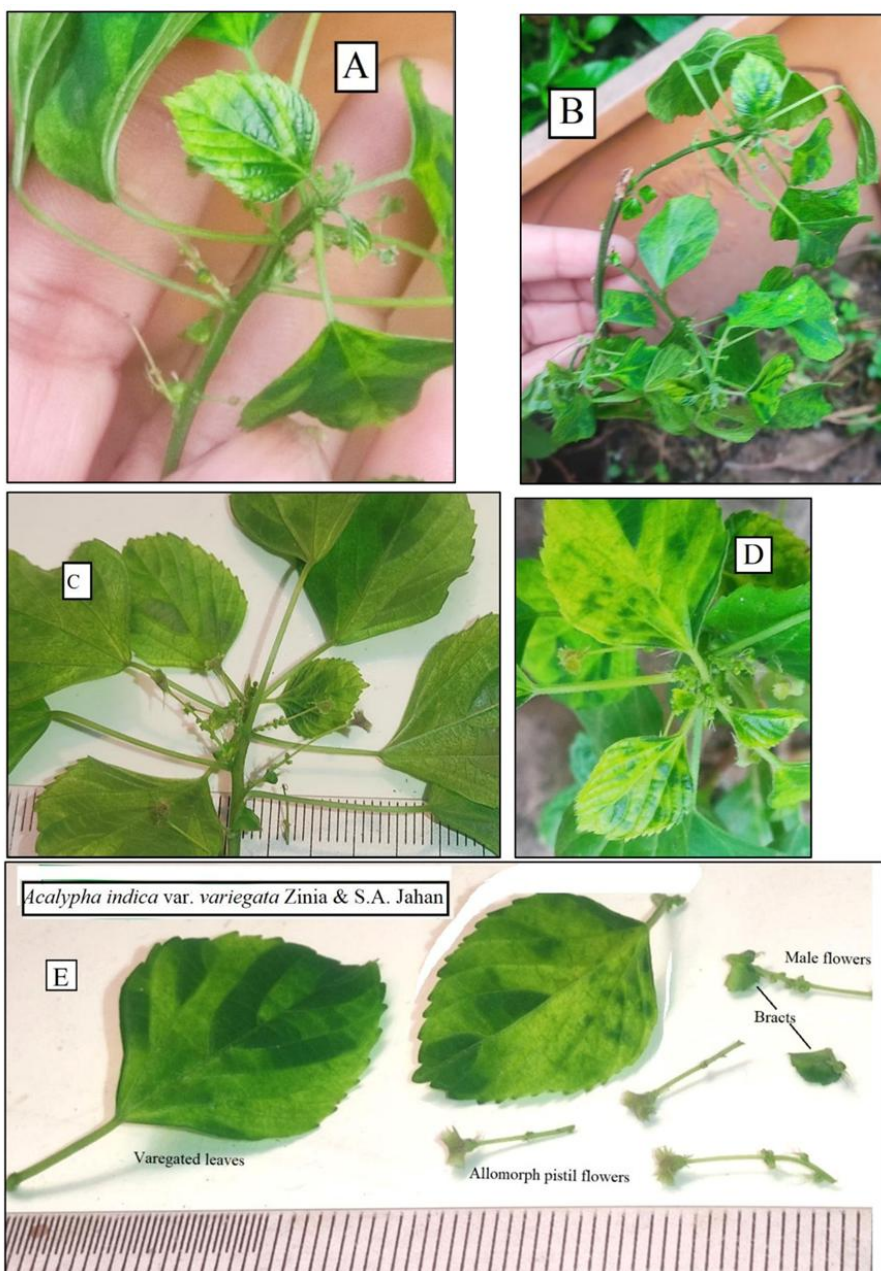
The name *Acalypha* comes from the Ancient Greek word *akalúphe* (ἀκαλύφη), meaning "nettle, *Variegata* for variegated leaves. Zinia for Zinia Nasrin Shumon (PhD Candidate-BUP) and S. A. Jahan for Shahzadi Akhter Jahan, a botany teacher from Bogura.

Specimen Examined

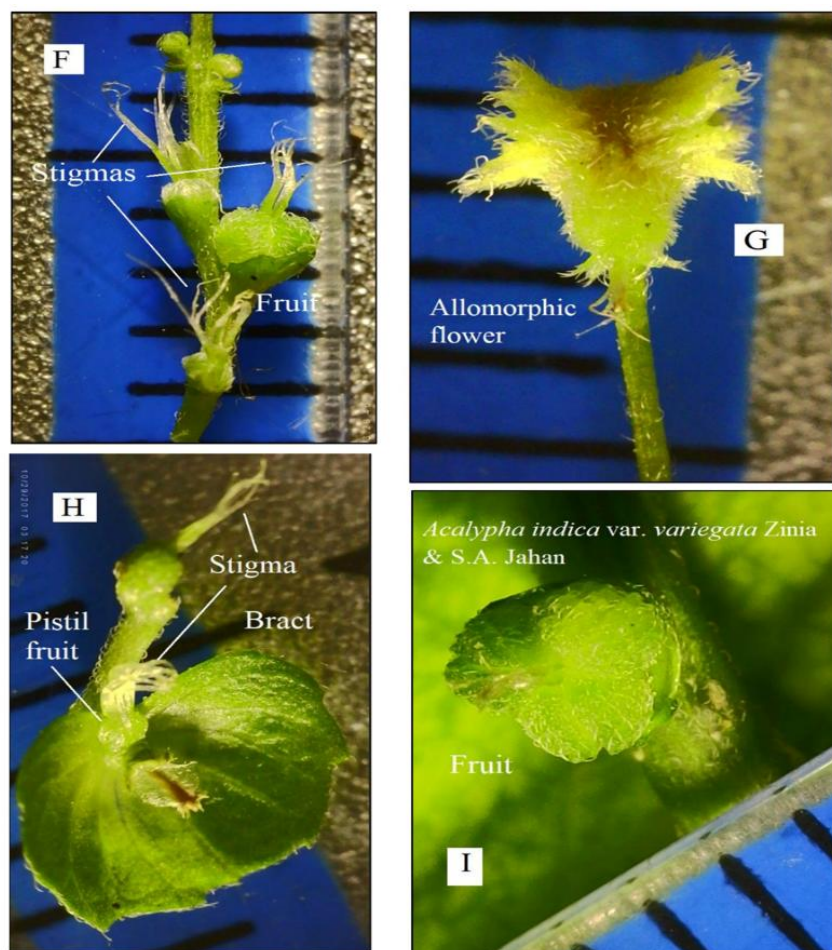
Zinia Nasrin Shumon, Herbarium sheet number – ZNS 532 (AAHBAU).

CONCLUSION

Acalypha indica var. *variegata* Zinia & S.A. Jahan described and illustrated (Fig-1,2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from *Euphorbiaceae* family. First published in First published in Sp. Pl.: 1003 (1753). This new species differs from *Acalypha indica* L. with variegated leaves. Showing in Botanical Illustration, photos.



A. Inflorescence. B. Full plant, C. Inflorescence with scale, D. Variegated leaves. E. Variegated leaves, bracts, male flowers and allomorphic flowers.



F. Pistil fruits with stigmas. G. Allomorphic flower. H. Round bract, Pistil fruits with stigmas. I. Fruit of *Acalypha indica* var. *variegata* Zinia & S.A. Jahan with scale.

REFERENCES

1. Acevedo-Rodríguez, P. & Strong, M.T. (2012). Catalogue of seed plants of the West Indies. Smithsonian Contributions to Botany 98: 1-1192.
2. Balakrishnan, N.P. & Chakrabarty, T. (2007). The family Euphorbiaceae in India. A synopsis of its profile, taxonomy and bibliography: 1-500. Bishen Singh Mahendra Pal Singh, Dehra Dun.
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:337497-1>
4. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30375178-2>
5. Radcliffe-Smith, A. (2001). Genera Euphorbiacearum. Royal Botanic Gardens, Kew.
6. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:327639-2>

2. *Acmella ciliata* var. *tricolor* Begum Rokeya & Zinia

English name – Tricolor toothache plant. **Bengali name** – বেগম রোকেয়ার ত্রিভা বনগাঁদা

ABSTRACT

Acmella ciliata var. *tricolor* Begum Rokeya & Zinia described and illustrated (Fig-1,2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from *Asteraceae* family. Which leaves are red, yellow and green – these three colors on it. These leaves differ from *Acmella ciliata* (Kunth) Cass.

INTRODUCTION

Acmella ciliata (Kunth) Cass. First published in G.-F.Cuvier, Dict. Sci. Nat., ed. 2. 24: 331 (1822). *Asteraceae* Bercht. & J.Presl. First published in Prir. Rostlin 254. 1820 [Jan-Apr 1820] (1820) nom. cons. *Acmella* Rich. ex Pers. First published in Syn. Pl. 2: 472 (1807). Includes 36 Accepted Species.

Keywords: *Asteraceae*, New species, Bangladesh.

Description: Habit: Perennial herb, stems usually prostrate (decumbent) to ascending, rooting at nodes, green to purple. Leaves: Ovate to broadly ovate, 2.3–7.5 cm long, with serrated (denticulate) margins, acute apex, and surfaces ranging from hairless (glabrous) to sparsely hairy (pilose). Have red, yellow and green – these three colors. Flowers: Yellow-orange ray and disk florets in radiate heads (capitula) that are solitary or in clusters, often appearing cone-shaped. Fruit (Achenes): Black, flattened, with a cork-like margin that is sparsely ciliate (hairy). Pappus: two very short bristles.

Taxonomic treatment

Acmella ciliata var. *tricolor* Begum Rokeya & Zinia, nov. p-6, Fig-1, Fig-2

TYPE: Bangladesh. RDA Campus, Bogura district (24.8526° N, 89.3730° E).

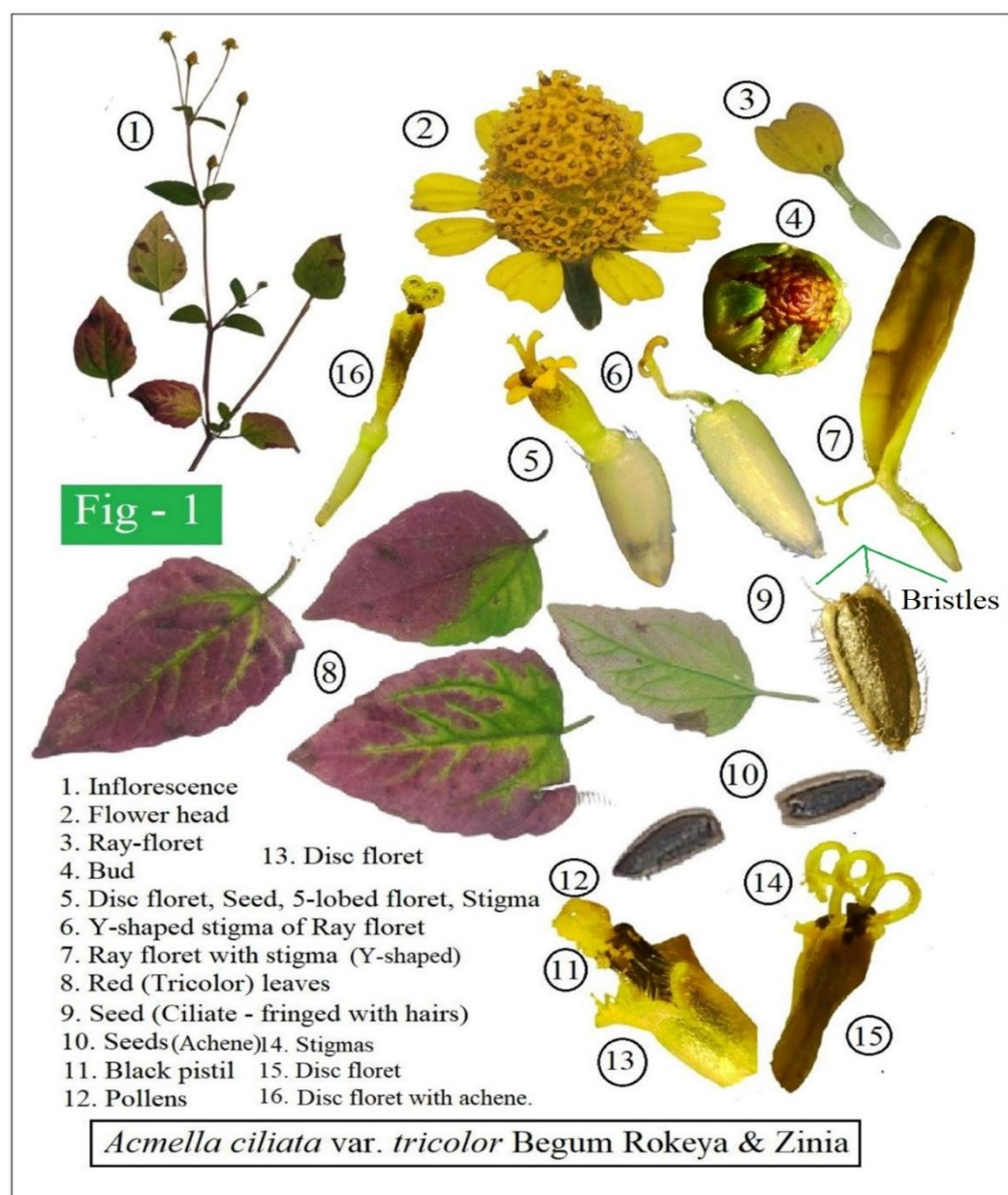
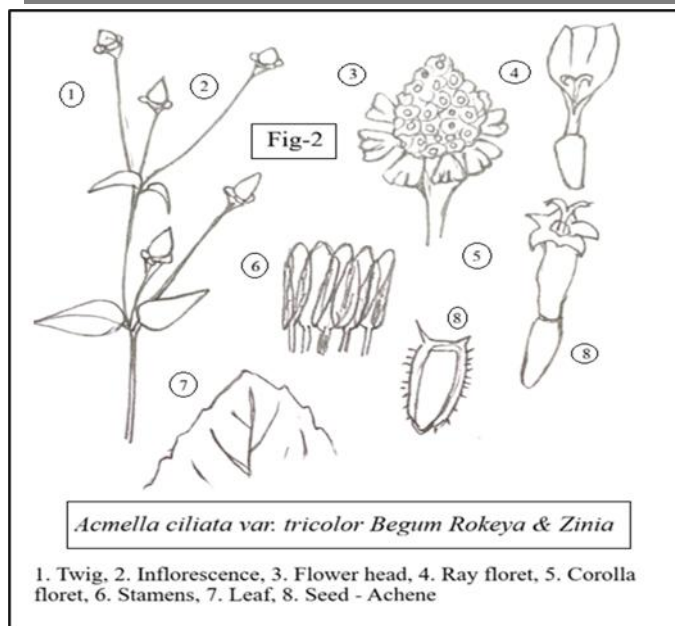


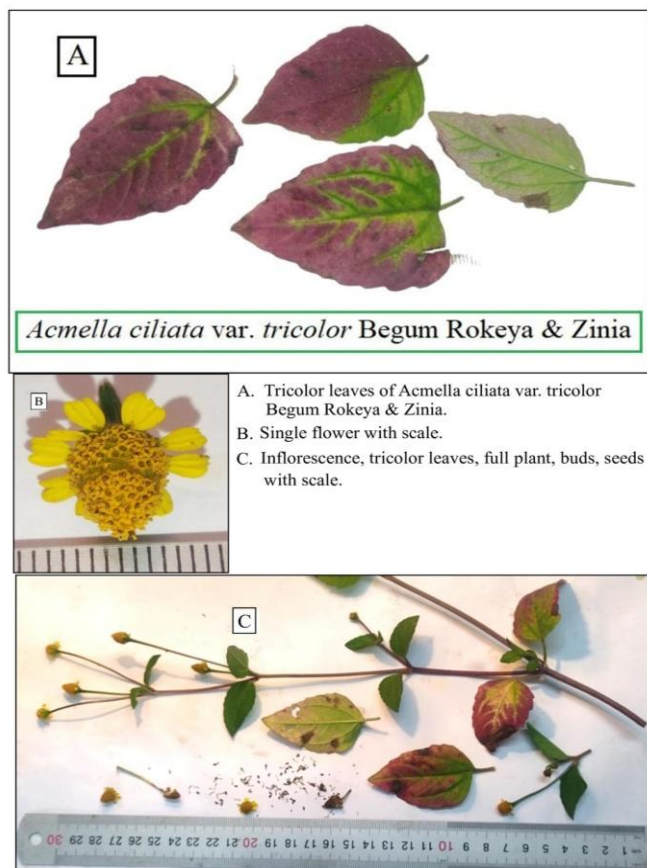
Fig-1: Botanical illustration of *Acmella ciliata* var. *tricolor* Begum Rokeya & Zinia.

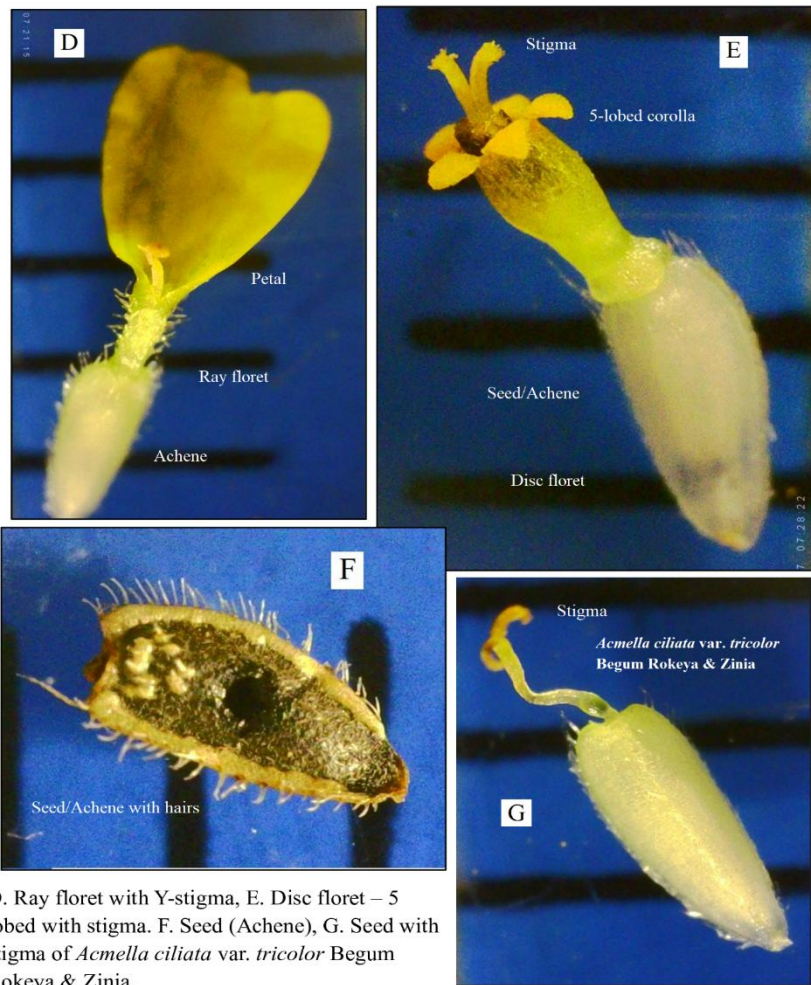


Etymology

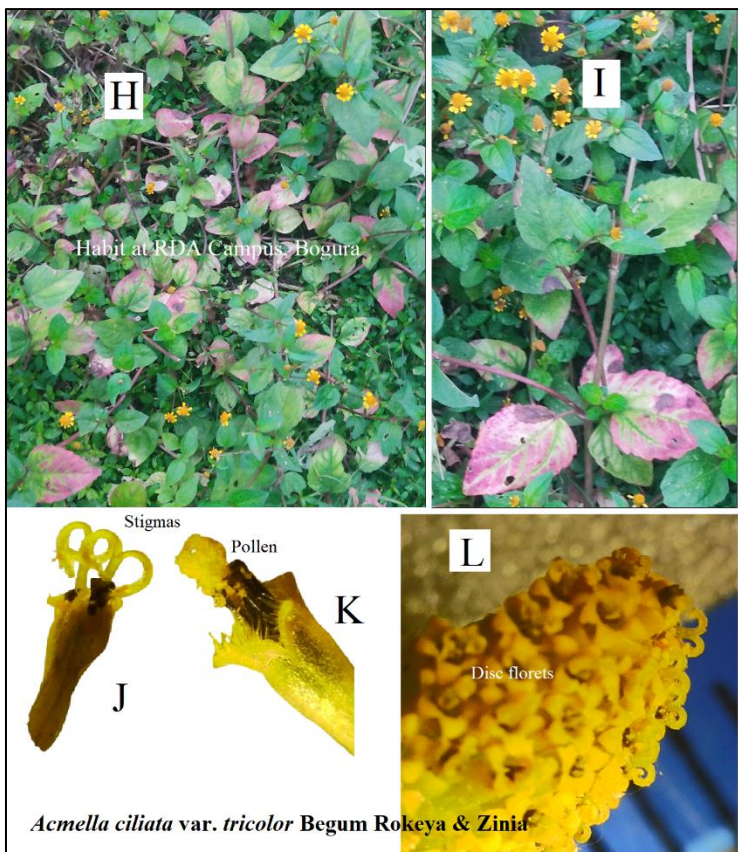
Acmella: The genus name comes from the Greek word akme, meaning "(the highest) point, edge, or peak of anything," likely referring to the pointed shape of the flower heads or leaves. *ciliata*: The species epithet is a Latin adjective derived from cilium, meaning "eyelash". Botanically, it describes the plant as having fine hairs. This species seeds have hairs. *Tricolor* for the leaves' color like red, yellow and green. Begum Rokeya for a prominent Bengali feminist thinker, writer, educator and political activist from British India. She is widely regarded as a pioneer of feminism in Bangladesh and India. Zinia for Zinia Nasrin Shumon (PhD candidate-BUP) from the same family tree of Begum Rokeya.

Specimen Examined Zinia Nasrin Shumon, Herbarium sheet number – ZNS 533 (AAHBAU)





D. Ray floret with Y-stigma, E. Disc floret – 5 lobed with stigma. F. Seed (Achene), G. Seed with stigma of *Acemella ciliata* var. *tricolor* Begum Rokeya & Zinia.



H. Habit at RDA Campus, Bogura. I. Inflorescence, J. Disc stigma. K. Pollens on stigma of Disc floret, L. Stigmas of disc florets of *Acemella ciliata* var. *tricolor* Begum Rokeya & Zinia.

Conclusion

Acmella ciliata var. *tricolor* Begum Rokeya & Zinia described and illustrated (Fig-1,2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from *Asteraceae* family. Which leaves are red, yellow and green – these three colors on it. These leaves differ from *Acmella ciliata* (Kunth) Cass. Have purple branches also. Differs showing in Botanical Illustration, photos.

References

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:174534-1>
2. Kiew, R. & al. (eds.) (2021). Malayan Forest Records 49: 1-403.
3. (2025). <http://dx.doi.org/10.13140/RG.2.2.26154.32968>. epublication.
4. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30001327-2>
5. Roskov Y. & al. (eds.) (2018). Species 2000 & ITIS Catalogue of Life Naturalis, Leiden, the Netherlands.
6. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:319342-2>
7. Bremer, K. (1994). Asteraceae: Cladistics & Classification. Timber Press, Portland, Oregon.
8. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30001327-2>

3. *Acmella uliginosa* var. *variegata* Begum Rokeya & Zinia.

English name - Marsh Para Cress. Bengali name – বিচিত্র নাকফুল/রোকেয়ার নাকফুল।

ABSTRACT

Acmella uliginosa var. *variegata* Begum Rokeya & Zinia described and illustrated (Fig-1.2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from *Asteraceae* family. Which leaves are red, yellow and green – these three colors on it. These leaves differ from *Acmella ciliata* (Kunth) Cass. Which is green only.

INTRODUCTION

Acmella uliginosa (Sw.) Cass. First published in G.-F.Cuvier, Dict. Sci. Nat., ed. 2. 24: 331 (1822). *Asteraceae* Bercht. & J.Presl. First published in Prir. Rostlin 254. 1820 [Jan-Apr 1820] (1820) nom. cons. *Acmella* Rich. ex Pers. First published in Syn. Pl. 2: 472 (1807). Includes 36 Accepted Species.

Keywords: *Asteraceae*, New species, Bangladesh.

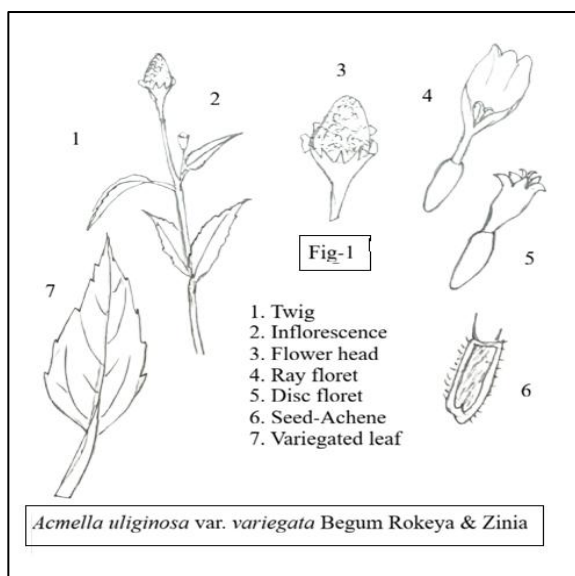
Description:

Habit: Annual to perennial herb, 10 cm, erect to decumbent (sprawling). Stems: Pink to purplish, smooth (glabrous) to slightly hairy (pilose). Leaves: Variegated, simple, opposite, lance-shaped to ovate, with toothed (dentate) margins and short petioles. Bracts are variegated also. Flowers: Yellow to orange-yellow, in solitary or few terminal, cone-shaped heads (capitula) (5-8 mm) with ray and disc florets. Ray floret with achene 3 mm and disc floret with achene 2 mm. Ray florets are few and small petaled. Fruit: Small, black, ciliated (hairy) achenes with a pappus of 1/2 short bristles. Flower stalk and petioles are pink also. It's small herb only 10 cm.

Taxonomic treatment

Acmella uliginosa var. *variegata* Begum Rokeya & Zinia, nov. p-5, Fig-1,2

TYPE: Bangladesh. RDA Campus, Bogura district (24.8526° N, 89.3730° E).



Etymology

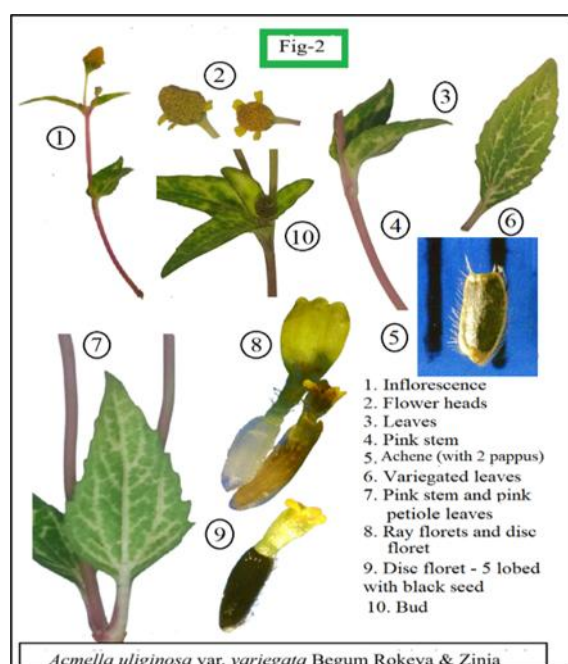
Acmella: The genus name comes from the Greek word akme, meaning "(the highest) point, edge, or peak of anything," likely referring to the pointed shape of the flower heads or leaves. *Uliginosa* comes from the Latin word uliginosus, meaning "marshy," "swampy," or "full of moisture,". *Variegata* for variegated leaves. Begum Rokeya for a prominent Bengali feminist thinker, writer, educator and political activist from British India. She is widely regarded as a pioneer of feminism in Bangladesh and India. Zinia for Zinia Nasrin Shumon (PhD candidate-BUP) from the same family tree of Begum Rokeya.

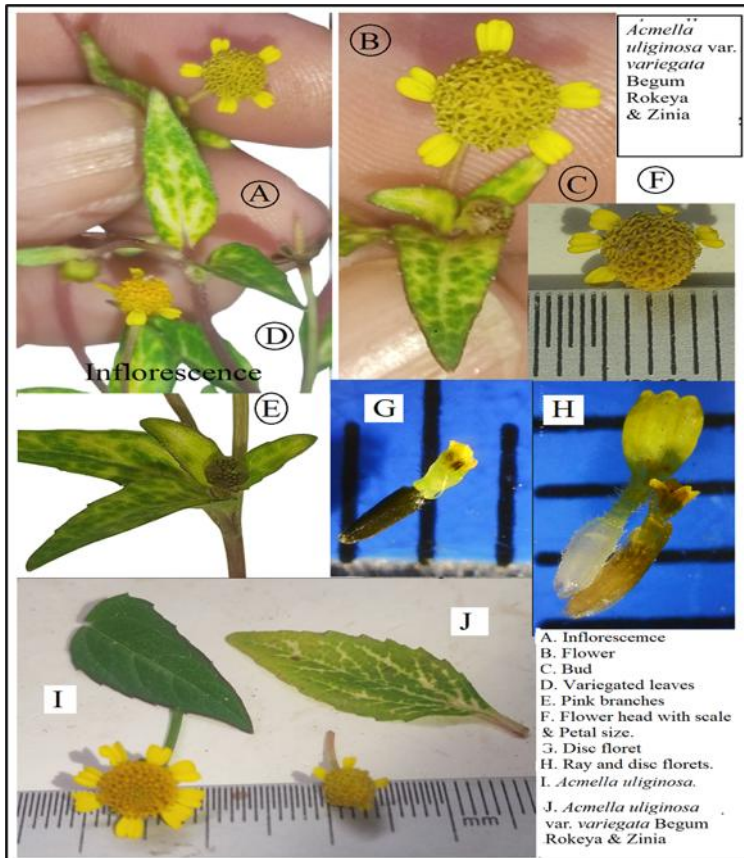
Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 344 (AAHBAU).

CONCLUSION

Acmella uliginosa var. *variegata* Begum Rokeya & Zinia described and illustrated (Fig-1,2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from Asteraceae family. Which leaves are variegated like green and yellow. Stem, petiole and flower stalks are pink in color. Differs from *Acmella uliginosa* (Sw.) Cass. Which have green leaves and green stems. Differs showing in Botanical Illustration and photos.





Acmella uliginosa var. *variegata* Begum Rokeya & Zinia

REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:174556-1>
2. Chang, C.-S., Kim, H. & Chang, K.S. (2021). Checklist of Far East Asian Vascular Flora 2: 627-1887. EABCN, Seoul.
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30001327-2>
4. Roskov Y. & al. (eds.) (2018). Species 2000 & ITIS Catalogue of Life Naturalis, Leiden, the Netherlands.
5. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:319342-2>
6. Flora of North America Editorial Committee (eds) (2006). Flora of North America North of Mexico. Oxford University Press, New York & Oxford. Vols 19, 20 & 21.
7. https://en.wikipedia.org/wiki/Acmella_uliginosa

4. *Ageratum variegata* Sumon & Liton (RDA)

English name: Variegated Floss Flower. Bengali name: লিটনের বিচিত্র ফুলকুড়ি/সুমনের বাহারি উচুন্টি

ABSTRACT

Ageratum variegata Sumon & Liton (RDA) described and illustrated (Fig-1,2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from *Asteraceae* family. This species leaves color are variegated. Mixed with yellow and green color. Bracts are maroon tinge. Leaves margin red. Stigmas are lavender color. Disc florets are lavender also. These identification keys differ from *Ageratum conyzoides* L. Includes 38 Accepted Species.

Keywords: *Asteraceae*, New species, Bangladesh.

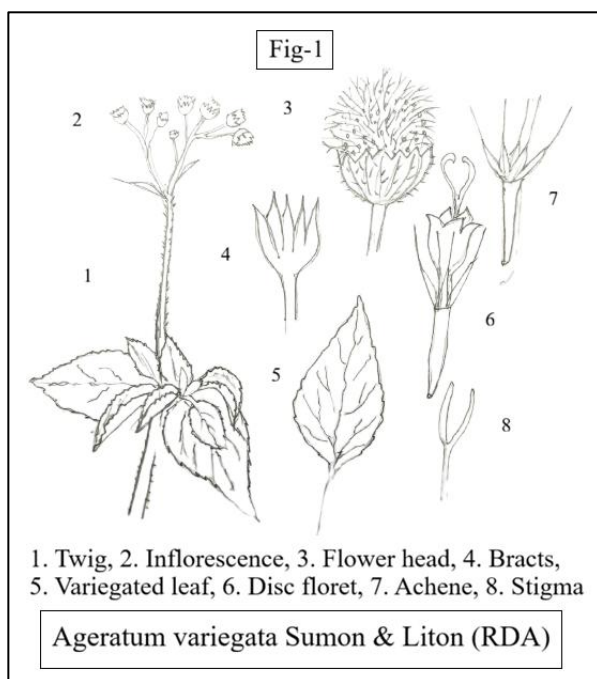
INTRODUCTION

Ageratum conyzoides L. First published in Sp. Pl.: 839 (1753). *Ageratum* L. First published in Sp. Pl.: 839 (1753). Includes 38 Accepted Species. *Asteraceae* Bercht. & J.Presl. First published in Prir. Rostlin 254. 1820 [Jan-Apr 1820] (1820) nom. cons.

Taxonomic treatment

Ageratum variegata Sumon & Liton (RDA), nov. p-6, Fig-1,2

TYPE:



Etymology

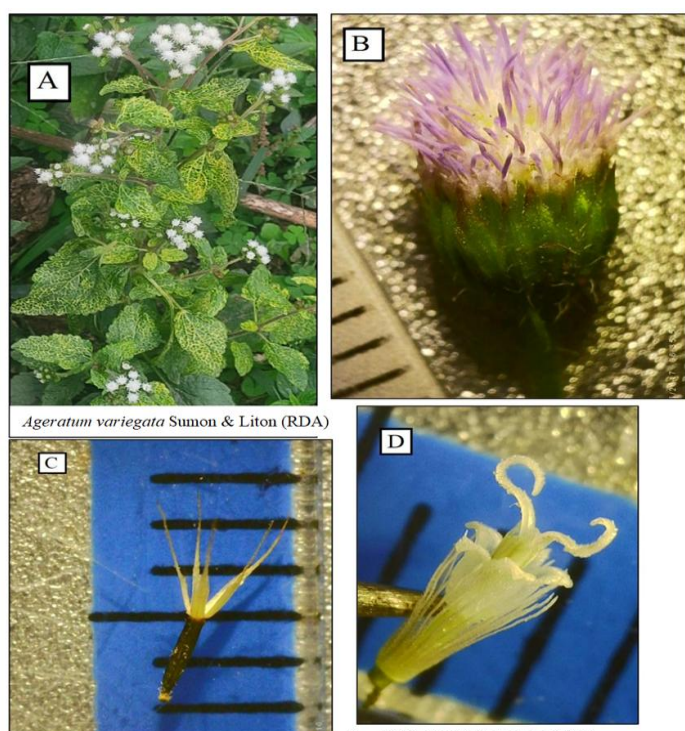
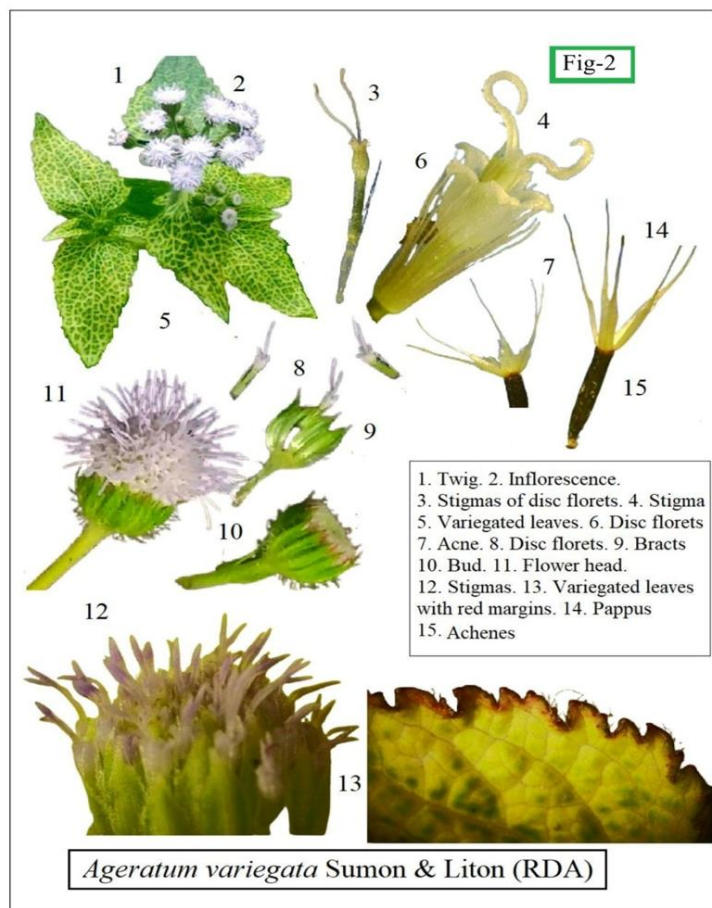
Ageratum: From the Greek "a" (not) and "geras" (old age), indicating the flowers' long life. Common Name: "Billy Goat Weed" or "Goat Weed" because its strong, pungent smell resembles that of a male goat. Variegata meaning 'Variegated leaves'. Sumon for Zinia Nasrin Shumon (PhD Candidate-BUP). Liton for Ferdous Hussain Khan (Liton), director of RDA (Rural Development Academy).

Specimen Examined

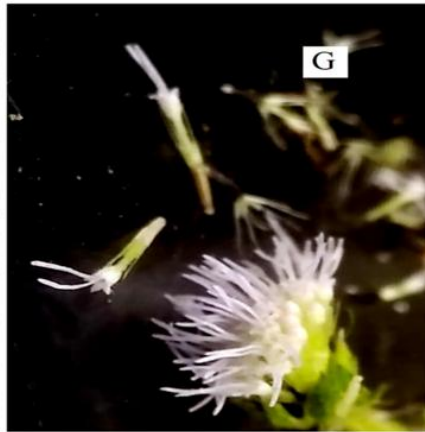
Zinia Nasrin Shumon, Herbarium sheet number – ZNS 345 (AAHBAU).

CONCLUSION

Ageratum variegata Sumon & Liton (RDA) described and illustrated (Fig-1,2) as a new species from RDA Campus, Bogura district (24.8526° N, 89.3730° E) from Asteraceae family. This species leaves color are variegated. Mixed with yellow and green color. Bracts are maroon tinge. Leaves margin red. Stigmas are lavender color. Disc florets are lavender also. These identification keys differ from *Ageratum conyzoides* L. Includes 38 Accepted Species. Showing in Botanical Illustration, photos.

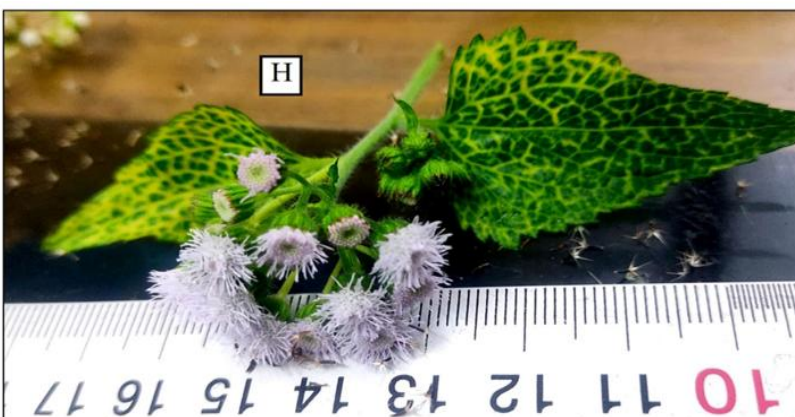


A. Habitat RDA Campus, Bogura
B. Flower head. C. Seed with pappus. D. Single disc floret (5 lobed) + hook-shaped stigma.



Ageratum variegata Sumon & Liton (RDA), . Flower heads with lavender color stigmas

E. Single disc floret with stigma. F. Flower heads of *Ageratum variegata* Sumon & Liton (RDA)
G. Flower heads with lavender stigmas and immature seeds.

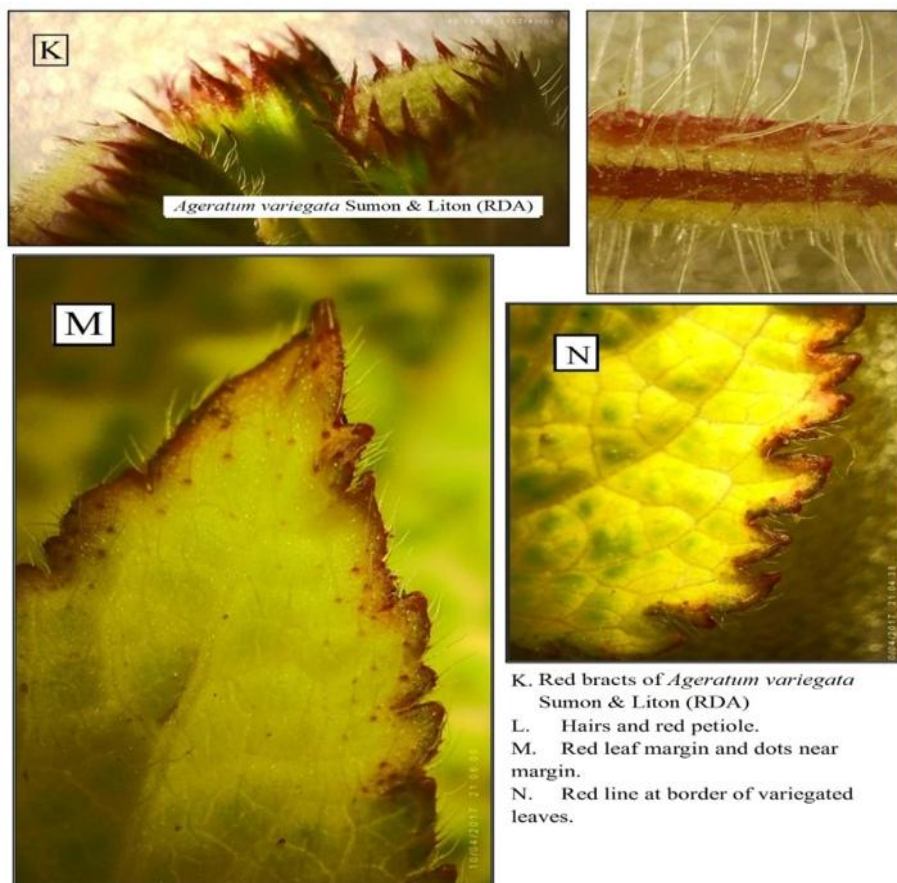


Ageratum variegata Sumon & Liton (RDA) , Corymb inflorescence, Pink buds, Variegated leaves.



H. Corymb inflorescence, variegated leaves.

I. Ribbed achene with pappus (5-6 scales). J. Corymb inflorescence, mature flower heads.



K. Red bracts of *Ageratum variegata* Sumon & Liton (RDA)
L. Hairs and red petiole.
M. Red leaf margin and dots near margin.
N. Red line at border of variegated leaves.

REFERENCES

- Sharma, V.H. (1987). Comments on the identity of *Ageratum conyzoides* L., and *A. houstonianum* Mill. – two naturalized weeds in India. Feddes Repert. 98(11–12): 557–560.
- <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:7086-2>
- <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30004082-2>
- Roskov Y. & al. (eds.) (2018). Species 2000 & ITIS Catalogue of Life Naturalis, Leiden, the Netherlands.
- <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:319342-2>
- Hind, D. J. N. (2007). Asteraceae (Compositae). In: V. H. Heywood, R. K. Brummitt, A. Culham & O. Seberg (eds), Flowering Plant Families of the World, pp. 46–52. Royal Botanic Gardens, Kew.

5. *Aphanamixis polystachya* var. *mahasthanana* Zinia (Pundra)

English name – Red Pithraj Tree. Bengali name – পুন্ড্র লাল পিথরাজ/মহাস্থানের লাল পিথরাজ

ABSTRACT

Aphanamixis polystachya var. *mahasthanana* Zinia (Pundra), described and illustrated (Fig-1) as a new species from Mahasthangarh, Bangladesh, is located around 24°57'40" N latitude and 89°20'34" E longitude, situated near Bogra district. Fruits are red in color. Scattered fruits hanging from long stalks like lichee fruits. Most of the fruits are one seeded. Leaves are deep green. Trunk, barks are ashy-grey. Wood is pink in color. Barks are smooth. Inflorescence are joined. These identification keys differ from *Aphanamixis polystachya* (Wall.) R.Parker and *Aphanamixis borneensis* (Miq.) Merr. Includes 3 Accepted Species.

Keywords: *Meliaceae*, New species, Bangladesh.

INTRODUCTION

Aphanamixis polystachya (Wall.) R.Parker. First published in Indian Forester 57: 486 (1931). *Aphanamixis*

Blume. First published in Bijdr. Fl. Ned. Ind.: 165 (1825). *Aphanamixis borneensis* (Miq.) Merr. First published in J. Straits Branch Roy. Asiat. Soc. 84(Spec. No.): 321 (1921). *Meliaceae* Juss. First published in Gen. Pl. [Jussieu] 263. 1789 [4 Aug 1789] (1789) nom. cons.

Taxonomic treatment

Aphanamixis polystachya var. *mahasthanana* Zinia (Pundra), nov. p-9, Fig-1,2

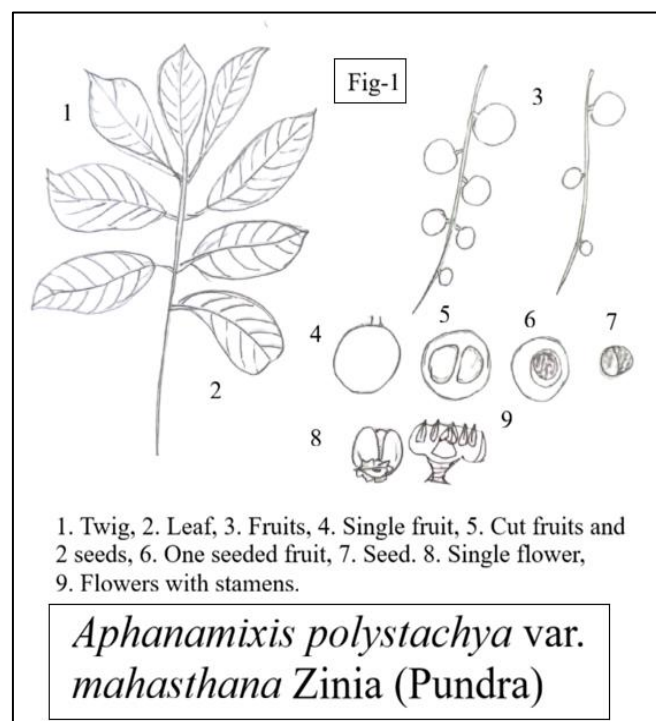
TYPE: Mahasthangarh, Bangladesh, is located around 24°57'40" N latitude and 89°20'34" E longitude.

Description

Habit: A large shrub or deciduous tree, often reaching 20 meters, with a spreading crown. Leaves: Pinnately compound, with 7-12 glossy, oblong-elliptic dark green leaflets that are red when young and become leathery. Flowers: Small, yellowish-green, sweetly scented, borne in clusters (panicles) in leaf axils, appearing in spring/summer. Jointed inflorescence, thick. Have 6 stamens. Fruits are red in color. Scattered fruits hanging from long stalks like lichee fruits. Leaves are deep green. Trunk, barks are ashy-grey. Wood is pink in color. Barks are smooth. Fruits: Pink-red, round to pear-shaped capsules, 2-4 cm across, containing 1-3 oily seeds with a red-orange aril. Most of the fruits are one seeded.

Etymology

Greek aphanēs (ἀφανής): meaning invisible or inconspicuous. Greek mixis (μίξις): meaning mixture or mating. A reference to the plant's inconspicuous flowers. Polystachya: Greek poly (πολύς): meaning many or much. Greek stachys (στάχυς): meaning spike or branch. Meaning: A reference to its much-branched male flowering shoots or spikes. Mahasthanana for Ancient city (2500 AD) of Pundranagar. Zinia for Zinia Nasrin Shumon (PhD Candidate-BUP). Pundra for Pundranagar – the ancient name of Mahasthan Garh.



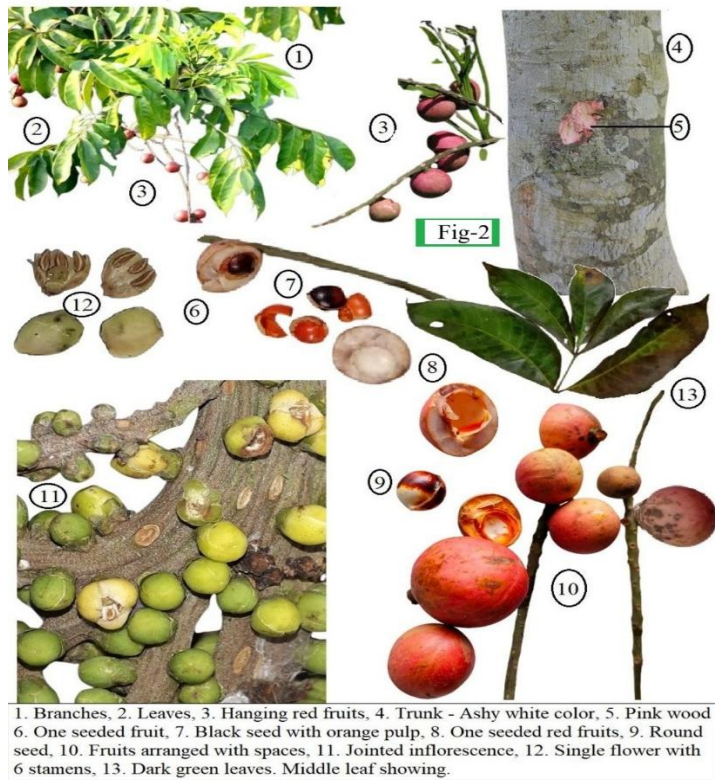
Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 346 (AAHBAU).

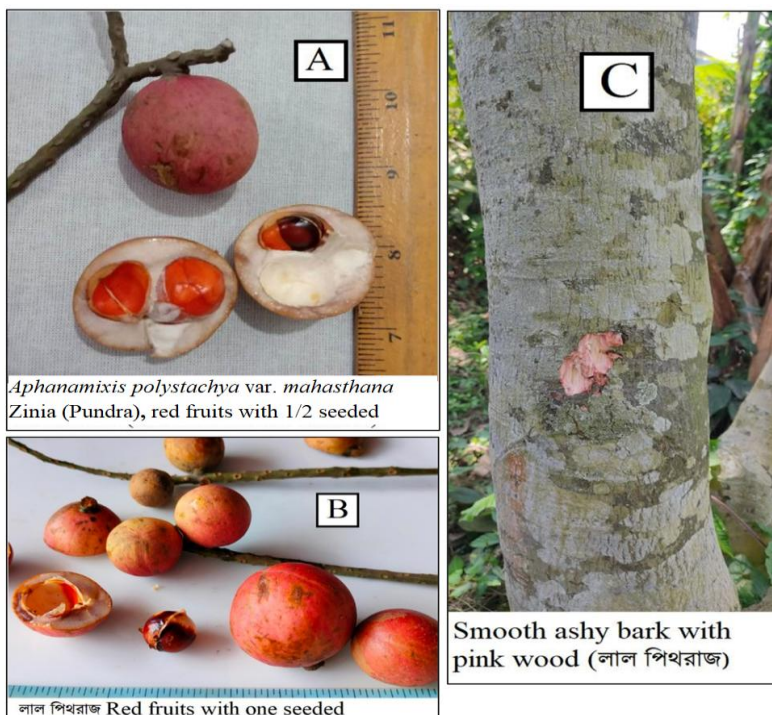
CONCLUSION

Aphanamixis polystachya var. *mahasthanana* Zinia (Pundra), described and illustrated (Fig-1,2) as a new species

from Mahasthangarh, Bangladesh, is located around 24°57'40" N latitude and 89°20'34" E longitude, situated near Bogra district. Fruits are red in color. Scattered fruits hanging from long stalks like lichee fruits. Most of the fruits are one seeded. Leaves are deep green. Trunk, barks are ashy-grey. Wood is pink in color. Barks are smooth. Inflorescence are joined. These identification keys differ from *Aphanamixis polystachya* (Wall.) R.Parker and *Aphanamixis borneensis* (Miq.) Merr. Includes 3 Accepted Species. Showing in Botanical Illustration and photos.



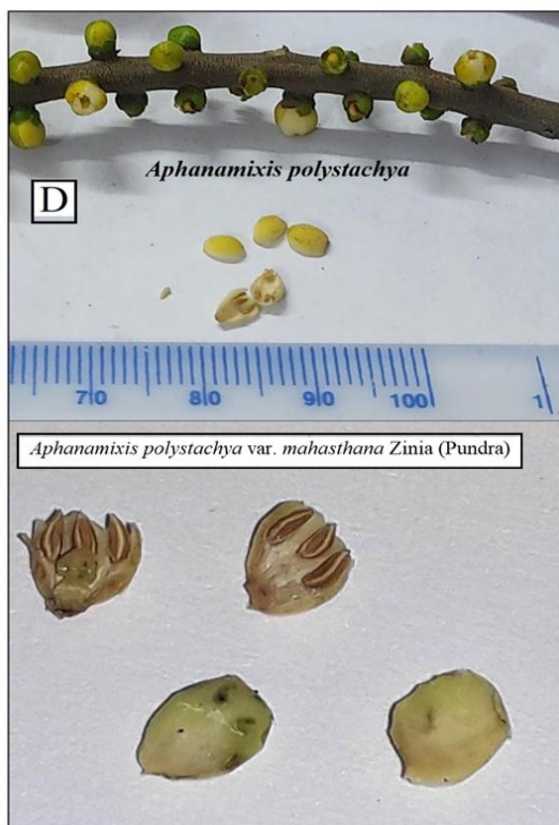
Aphanamixis polystachya var. *mahasthana* Zinia



A. *Aphanamixis polystachya* var. *mahasthana* Zinia (Pundra) fruit with one seed in average.

B. Fruits with cm scale.

C. Smooth ashy-white bark with pink wood.



Aphanamixis polystachya and *Aphanamixis polystachya* var. *mahasthanana* Zinia (Pundra) - 6 stamens with single flowers.



E. Differences in bark and wood color in two species.



Aphanamixis polystachya var. mahasthanica inflorescence which is jointed

F. *Aphanamixis polystachya* var. *mahasthanica* Zinia (Pundra), inflorescence is jointed together.

G. *Aphanamixis polystachya* leafy inflorescence and single inflorescence in Botanical illustration.

H. *Aphanamixis polystachya* single inflorescence, twig, fruit and seeds.



Aphanamixis polystachya inflorescence



Aphanamixis polystachya



Aphanamixis borneensis (Miq.) Merr.

Identification keys

1. Red color fruits,
2. Ashy white bark and smooth but *Aphanamixis polystachya* bark brown and rough. Pink wood but *Aphanamixis polystachya* wood brown.
3. Jointed inflorescence, 4. Dark green leaves.

I. *Aphanamixis borneensis* (Miq.) Merr.

J. *Aphanamixis polystachya* var. *mahasthanica* Zinia (Pundra) hanging red fruits not cling like *Aphanamixis polystachya*.



Aphanamixis polystachya var. *mahasthanica* Zinia (Pundra), red fruits
Mahasthan garh, Bogura, Bangladesh.

REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:577579-1>
2. Bosser, J. & al. (eds.) (1997). Flore des Mascareignes 69: 79-1. IRD Éditions, MSIRI, RBG-Kew, Paris.
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:26676-1>
4. Govaerts, R. (1995). World Checklist of Seed Plants 1(1, 2): 1-483, 529. MIM, Deurne.
5. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:577595-1>
6. Kalkman, C. & al. (eds.) (1995-1996). Flora Malesiana 12: 1-784. Noordhoff-Kolff N.V., Djakarta.
7. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30001419-2>
8. Mabberley, D. J., Pannell, C. M. & Sing, A. M. (1995). Meliaceae. Flora Malesiana, Ser. I, 12: 1–407. National Herbarium of the Netherlands, Leiden.

6. *Campanula dimorphantha* var. *purpurea* Miraz (RCC)

English name – Miraz’s Bell flower. RCC bell flower.

Bengali name – মিরাজের ঘন্টিফুল/আরসিসি ঘন্টিফুল

INTRODUCTION

Campanula dimorphantha Schweinf. First published in Beitr. Fl. Aethiop.: 140 (1867). *Campanula* L. First published in Sp. Pl.: 164 (1753). *Campanulaceae* Juss. First published in Gen. Pl. Paris. 163. 1789 [4 Aug 1789] (1789)nom. cons. The genus includes over 500 species and several subspecies, distributed across the temperate and subtropical regions of the Northern Hemisphere. Includes 455 accepted Species accepted by Kew. The family *Campanulaceae* (also bellflower family), of the order Asterales, contains nearly 2400 species in 84 genera of herbaceous plants, shrubs, and rarely small trees, often with milky sap.

Description: Stems: ribbed, erect, slender, hairy (hispid), simple or branched from the base. Leaves: spatulate, elliptic, or linear with tiny teeth (serrulate) on the margins; lower leaves wither early. Purple color underneath the leaves. Flowers: Purple or blue-purple, bell-shaped (campanulate), growing in terminal clusters or panicles. Petals 5-9. Buds are purple tinged. Hairy bract. 5-9 stamens. Stigma 4-5-6 lobed. Fruits & Seeds: Short stalked seed-pods and purple in color. Small round (globose) seed capsules containing smooth, compressed, yellow-brown seeds.

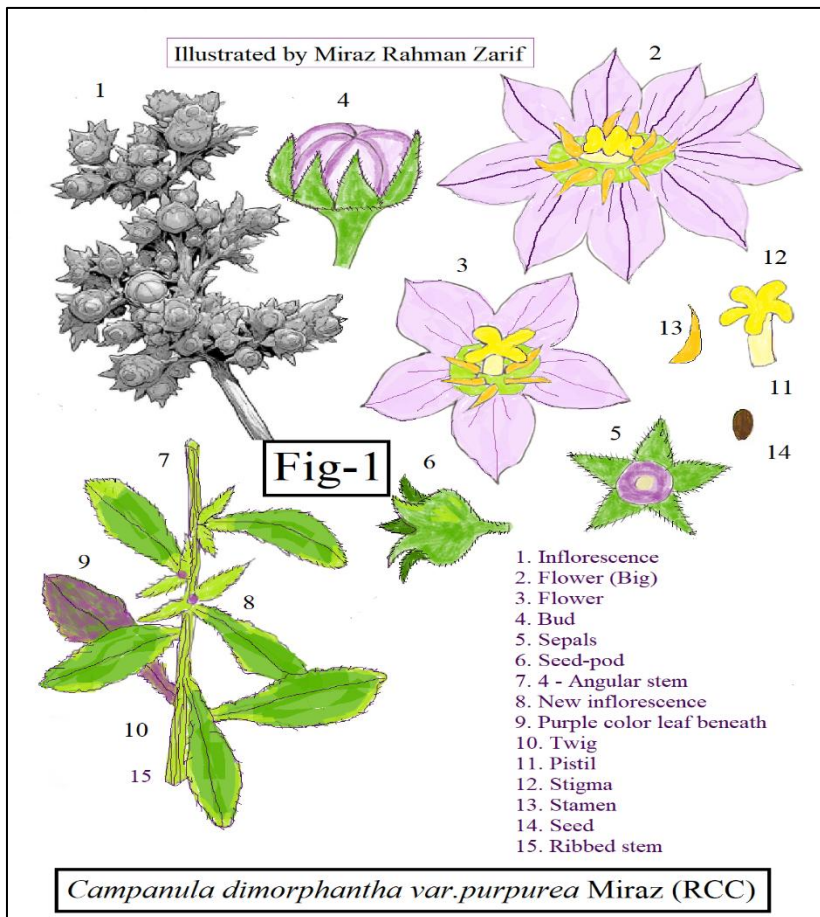
Taxonomic treatment

Campanula dimorphantha var. *purpurea* Miraz (RCC)), nov. p-5, Fig-1,2

TYPE: Rajshahi, Bangladesh, is located 24.3740° N latitude and 88.6011° E longitude.

Etymology

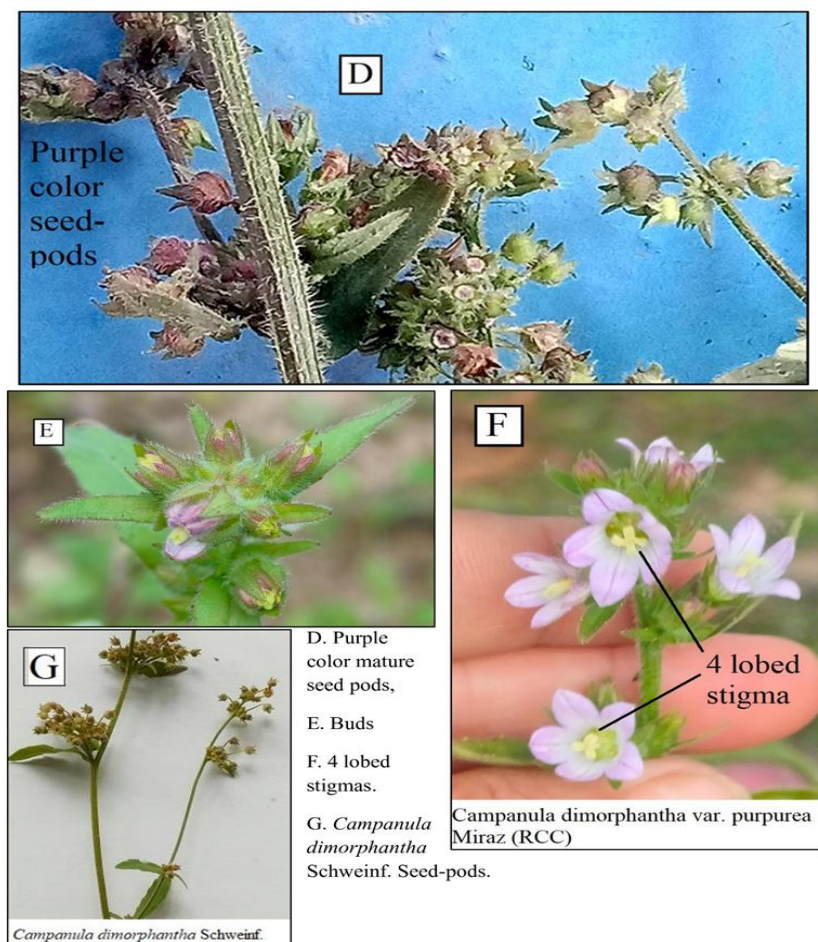
Campanula dimorphantha var. *purpurea* Miraz (RCC)), here *purpurea* for purple leaves and seed-pods. Miraz for Miraz Rahman Zarif – the botanical illustrator and collector of this plant. RCC for Rajshahi Cadet College, Rajshahi district from Bangladesh.



1. Botanical Illustration.



A. *Campanula dimorphantha* var. *purpurea* Miraz (RCC) big flower with 6 lobed stigma
B. Flowers. C. Purple color underneath of leaves.



Identification keys

1. Purple underneath leaves
2. Purple color seed-pods
3. 4-6 lobed stigmas
4. Short stalked seed-pods.

Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 347 (AAHBAU).

CONCLUSION

With all these differences and identification keys it is sure that it is a variety of *Campanula dimorphantha* Schweinf. Which is a new species named *Campanula dimorphantha* var. *purpurea* Miraz (RCC). Differences in Purple underneath leaves, purple color seed-pods, 4-6 lobed stigmas, short stalked seed-pods.

REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:140219-1>
2. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30027807-2>
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30000171-2>
4. Knox, E. B., Muasya, A. M. & Muchhala, N. (2008). The predominantly South American clade of Lobeliaceae. Syst. Bot. 33: 462–468.
5. (2020). <https://doi.org/10.1111/jse.12586>. epublication.
6. Balkrishna, A. (2018). Flora of Morni Hills (Research & Possibilities): 1-581. Divya Yoga Mandir Trust.
7. <https://www.flowersofindia.net/catalog/slides/Two-Form%20Bellflower.html>

7. *Dischidia bengalensis* var. *linifolia* Zinia & S.A. Jahan

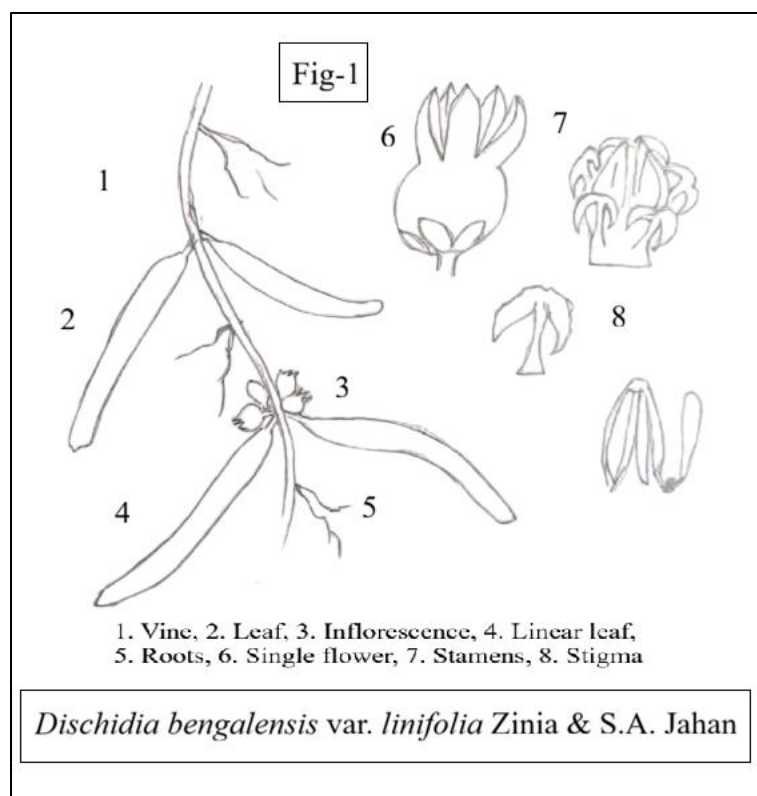
English name – Linear Ant vine, Jahan’s ant vine. Bengali name – জাহানের পিপিলিকা লতা/ সরুপাতি পিপিলিকা লতা

INTRODUCTION

Dischidia bengalensis Colebr. First published in Trans. Linn. Soc. London 12: 357 (1818). *Dischidia* R.Br. First published in Prodr. Fl. Nov. Holland.: 461 (1810). Includes 128 Accepted Species. *Apocynaceae* Juss. First published in Gen. Pl. Paris. 143. 1789 [4 Aug 1789] (1789) nom. cons. Includes 380 Accepted Genera.

Description:

Succulent Vine is a slender, creeping, tree-dwelling vine with fleshy stems. Vine wide 3-4mm. Leaves are fleshy, green, linear up to 3-4 cm long by 4-5 mm wide. Leaves of some other species of the genus *Dischidia* are modified into pockets or pouches. One example is Kangaroo Pocket. Flowers are tiny, very pale cream to dull yellow, urn-shaped, up to 2.5 mm long by 3 mm wide. Flower is urn-shaped (urceolate), tiny, and measures about 3-4 mm long. It is creamy-white to pale yellow, featuring a five-toothed mouth with a villous (hairy) throat and triangular lobes measuring roughly 1.3-1.5 mm. Five stamens fuse with the stigma to form the gynostegium. Anthers: Erect with an apical membrane extending over the top. Pollen: Grouped into two waxy pollinia per pollinarium, connected by tiny arms (caudicles). Positioned centrally beneath the anther tips. Covering: Shielded or overlaid by the apical membranes of the anthers, requiring specialized insect pollinators to lift the structure and transfer pollen.



Taxonomic treatment

Dischidia bengalensis var. *linifolia* Zinia & S.A. Jahan, nov. p-5, Fig-1,2

TYPE: Bogura, Bangladesh, is located 24.8510° N and longitude 89.3711° E in Bangladesh.

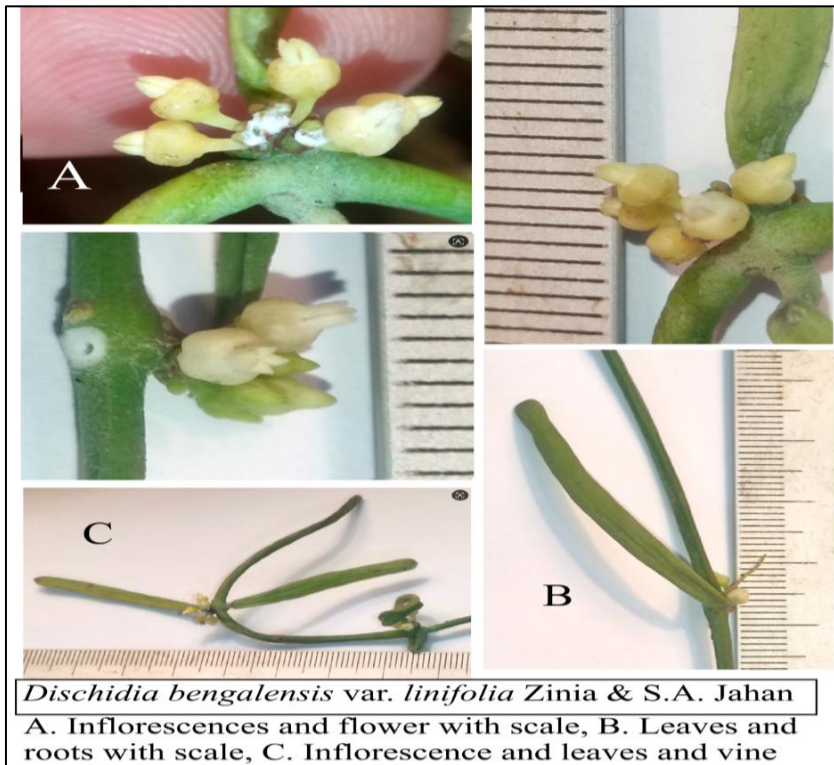
Etymology

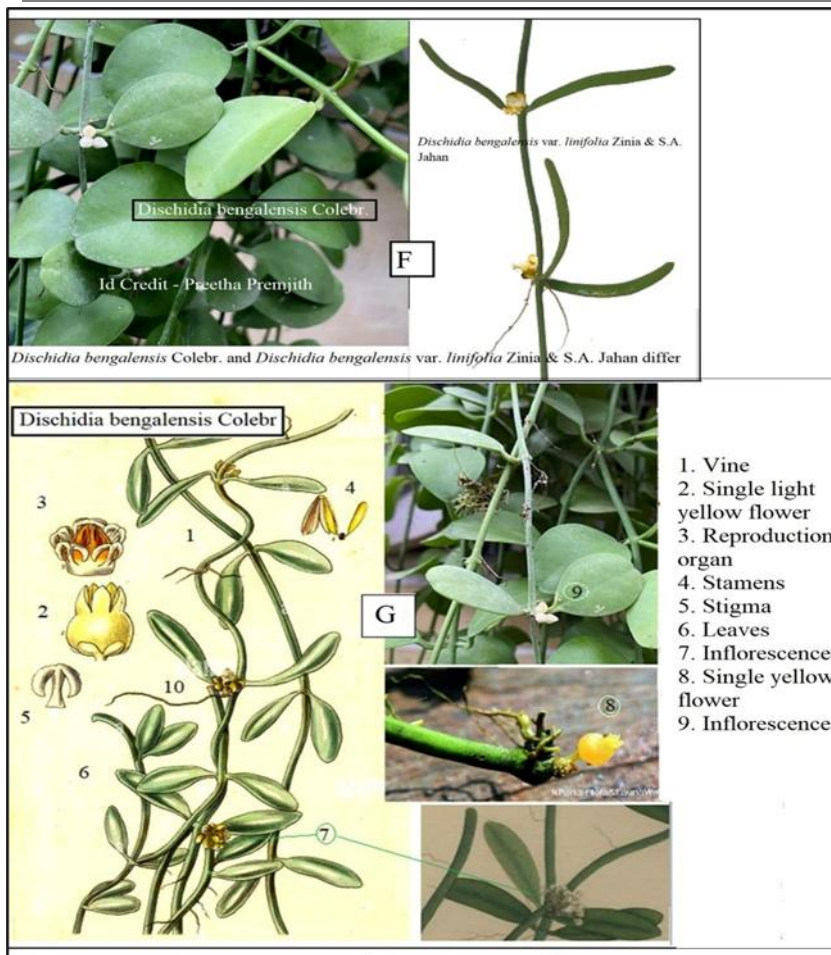
Dischidia bengalensis var. *linifolia* Zinia & S.A. Jahan, here *Linifolia* for linear leaves. Zinia for Zinia Nasrin

Shumon, PhD student, BUP. S.A Jahan, Shahazadi Akhter Jahan (Rani), a botany teacher from Bogura district.

Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 348 (AAHBAU).





CONCLUSION

With all these differences and identification keys it is sure that *Dischidia bengalensis* var. *linifolia* Zinia & S.A. Jahan is a variety of *Dischidia bengalensis*. Which is different with green leaves not dull green and variegated like *Dischidia bengalensis*. Linear leaves main differences. So, *Dischidia bengalensis* var. *linifolia* Zinia & S.A. Jahan is a new species.

REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:96902-1>
2. Karthigeyan, K., Pandey, R.P. & Mao, A.A. (eds.) (2023). Flora of Andaman and Nicobar Islands 2: 1-689. Botanical Survey of India. Ministry of environment, forest and climate change.
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:60474363-2>
4. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30000008-2>
5. <https://www.alamy.com/bengal-dischidia-dischidia-bengalensis-dischidia-benghalensis-handcoloured-copperplate-engraving-by-swan-after-an-illustration-by-william-jackson-hooker-from-samuel-curtiss-botanical-magazine-london-1829-image210588273.htm>

8. *Justicia subrufa* Begum Rokeya & Zinia

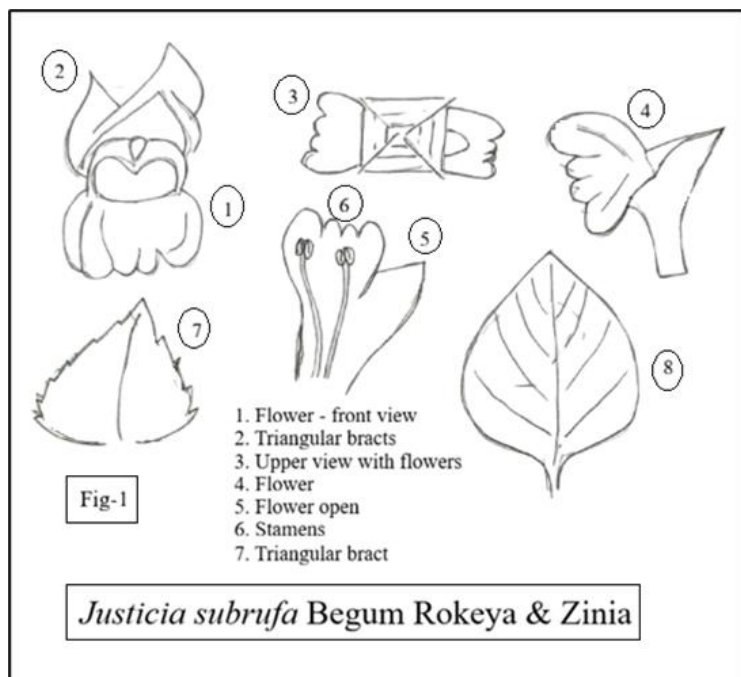
English name – Rokeya's Red Pindi.

Bengali name – বেগম রোকেয়ার লাল পিন্ডি

INTRODUCTION

Justicia L. First published in Sp. Pl.: 15 (1753), nom. cons. Includes 959 Accepted Species. *Acanthaceae* Juss.

First published in Gen. Pl. Paris. 102. 1789 [4 Aug 1789] (1789)nom. cons. Includes 209 Accepted Genera.



Description:

This reddish plant is an herb found in shallow water, in swamps. Erect and branched. Height 10-30 cm. Red leaves are ovate-oblong 1.5-2cm. Inflorescence 3-5cm long. Flowers are borne in spikes covered with overlapping bracts. Flowers are pinkish white, two lipped, 5-7cm. Lower lip is minutely toothed 4 lobed, upper one is entire, triangular. Red bracts are also triangular and toothed. Upper view like pyramid. Red Rokeya's Pindi is native to Bangladesh. Flowering: March-May.

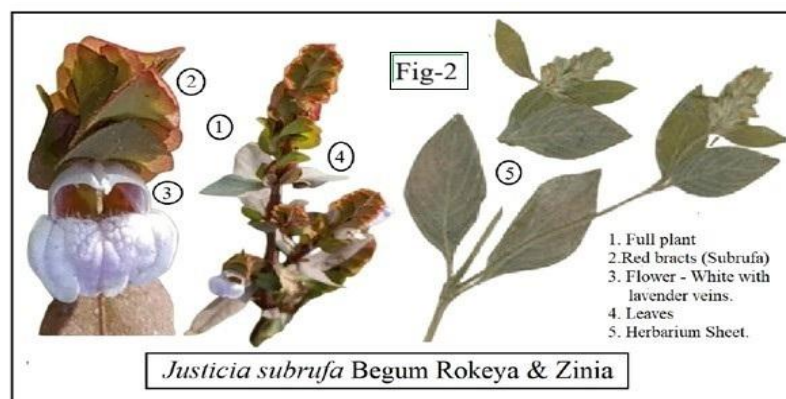


Fig-1: *Justicia subrufa* Begum Rokeya & Zinia.



Single flower, bracts and leafy inflorescence of *Justicia subrufa* Begum Rokeya & Zinia

Etymology

Justicia subrufa Begum Rokeya & Zinia, here *Subrufa* Greek meaning (Latin root): Red, ruddy, or red-brown. Begum Rokeya for a prominent Bengali feminist thinker, writer, educator and political activist from British India. She is widely regarded as a pioneer of feminism in Bangladesh and India. Zinia for Zinia Nasrin Shumon (PhD candidate-BUP) from the same family tree of Begum Rokeya.



Taxonomic treatment

Justicia subrufa Begum Rokeya & Zinia. nov. p-5, Fig-1,2

TYPE: Rajshahi, Bangladesh, is located approximately 24.3740° N latitude and 88.6011° E longitude.

Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 349 (AAHBAU).

CONCLUSION

Justicia subrufa Begum Rokeya & Zinia, from *Acanthaceae* family described as a new species. Difference with its pinkish-white flowers, red leaves, Triangular bracts and whole plant is red. Stem and branches also. Flower's corolla lobed by 4. Which is different from other *Justicia* species.

REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:326849-2>
2. Daniel, T.F. & Figueiredo, E. (2009). The California Academy of Sciences Gulf of Guinea Expeditions (2001, 2006, 2008) VII. Acanthaceae of São Tomé and Príncipe. Proceedings of the California Academy of Sciences, IV, 60: 623-674.
3. Brummitt, R. K. (2007c). Acanthaceae. In: V. H. Heywood, R. K. Brummitt, A. Culham & O. Seberg (eds), Flowering Plant Families of the World, pp. 23–24. Royal Botanic Gardens, Kew.

4. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30000618-2>
5. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30016608-2>

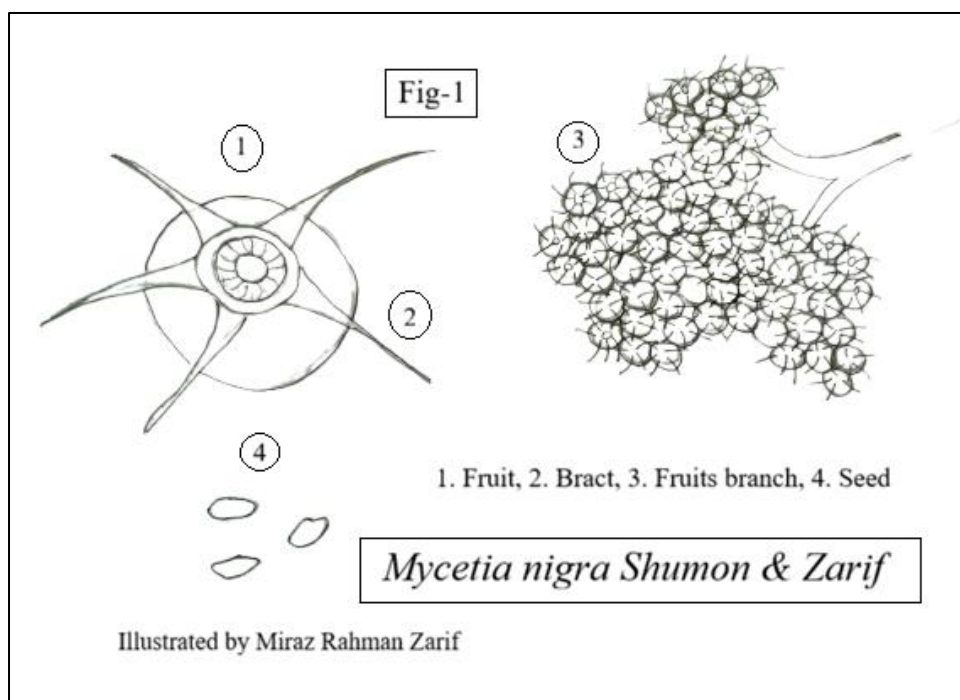
9. *Mycetia nigra* Shumon & Zarif

English name – Black Myceia, Khadimnagar’s Mycetia.

Benali name – খাদিমনগরের মাইসেটিয়া

INTRODUCTION

Mycetia Reinw. First published in Syll. Pl. Nov. 2: 9 (1825). Includes 55 Accepted Species. Rubiaceae Juss. First published in Gen. Pl. Paris. 196. 1789 [4 Aug 1789] (1789)nom. cons. Includes 625 Accepted Genera.



Description

Black fruit *Mycetia* is a single-stemmed, often unbranched shrub or treelet, up to 1-2 m tall; young parts hairy. Flowers are borne in many branched cymes, at branch-ends, many-flowered, branches slender; bracts long acute 1-1.5 cm long. Flowers are 5-6 merous. Fruits 3.5-8 mm. Seeds 0.3-0.5 mm. Black. *Mycetia* is found in Bangladesh.

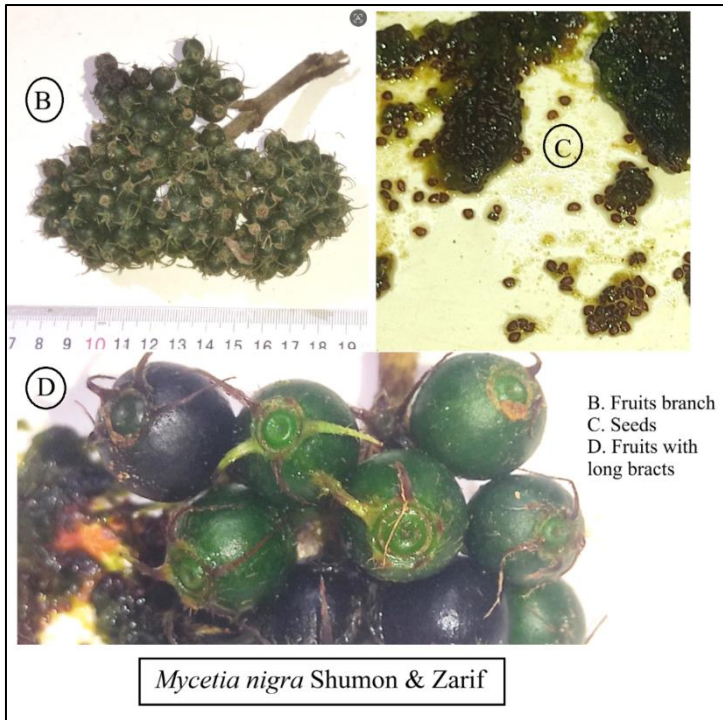
Etymology

Mycetia nigra Shumon & Zarif, here *nigra* for its black fruits. Shumon. Shumon for Zinia Nasrin Shumon (PhD candidate-BUP). Zarif for Miraz Rahman Zarif. Who is the Botanical illustrator and collector of this plant.

Taxonomic treatment

Mycetia nigra Shumon & Zarif, nov. p-5, Fig-1,2

TYPE: Khadimnagr, Sylhet, Bangladesh, is located approximately 24°56' to 24°58' N latitude and 91°55' to 91°59' E longitude.

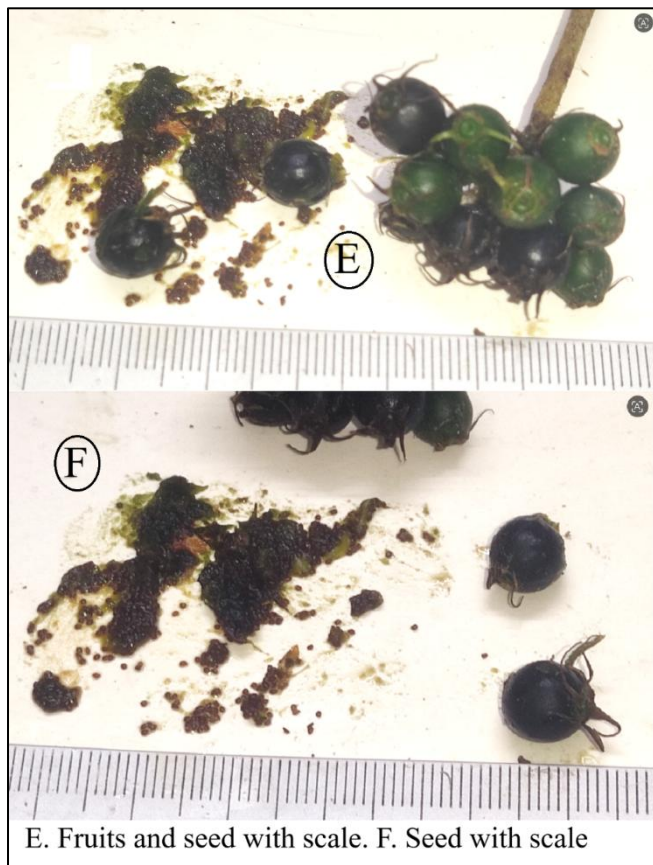


Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 350 (AAHBAU).

CONCLUSION

Mycetia nigra Shumon & Zarif from *Rubiaceae* family, described (Fig-1,2) as a new species from Khadimnagar, Sylhet, Bangladesh. Differences in fruits, which is black. When other *Mycetia* fruits are white and fleshy.



REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:34949-1>
2. Govaerts, R. (2003). World Checklist of Selected Plant Families Database in ACCESS: 1-216203. The Board of Trustees of the Royal Botanic Gardens, Kew.
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30032120-2>
4. <https://www.flowersofindia.net/risearch/search.php?query=mycetia&stpos=0&stype=AND>

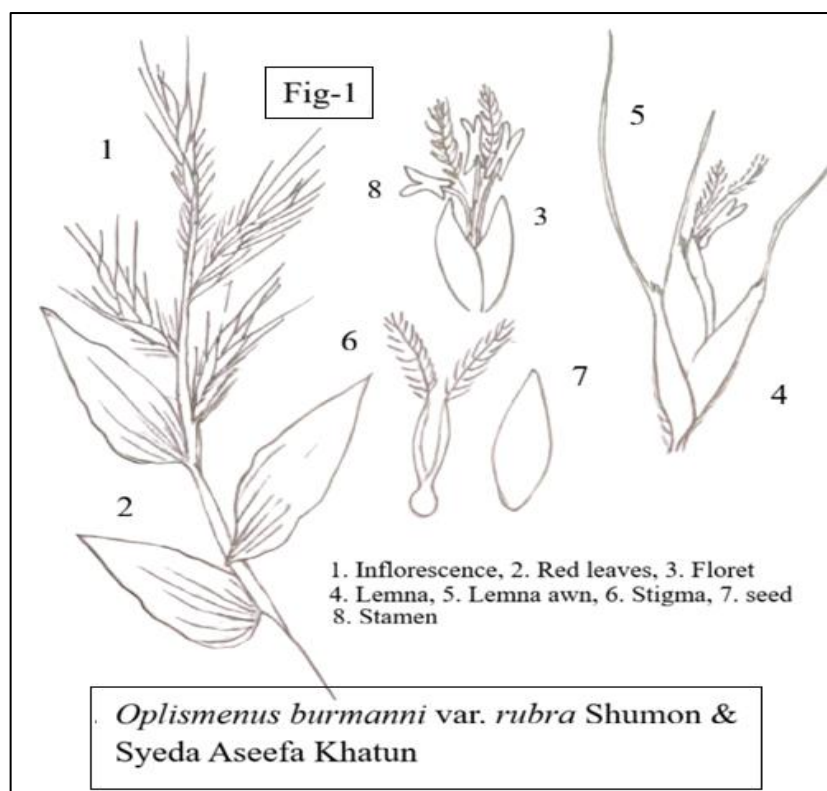
10. *Oplismenus burmanni* var. *rubra* Shumon & Syeda Aseefa Khatun

English name – Basket grass

Bengali name – গোলাপি বল্লম ঘাস, আসেফার বল্লম ঘাস

INTRODUCTION

Oplismenus P.Beauv. First published in Fl. Oware 2: 14 (1810), nom. cons. Includes 8 Accepted Species. *Oplismenus burmanni* (Retz.) P.Beauv. First published in Ess. Agrostogr.: 54 (1812) *Poaceae* Barnhart. First published in Bull. Torrey Bot. Club 22(1): 7. 1895 [15 Jan 1895] (1895)nom. cons. Includes 813 Accepted Genera.



Description:

Red Basket grass is an annual grass with prostrate or trailing stems 4-7 cm long. Leaves are reddish green, lance shaped to narrowly ovate, up to 3 cm long, 0.5-2 cm wide, prominently wavy. Flowers are borne in 1-2 cm long inflorescences. Spikelets are lance shaped, 5 mm long. Glumes with a rough awn, that of the lower 2.5-5 mm long, the upper shorter. Anther 1mm. 2 lobed stigma 1.5 mm.

Taxonomic treatment

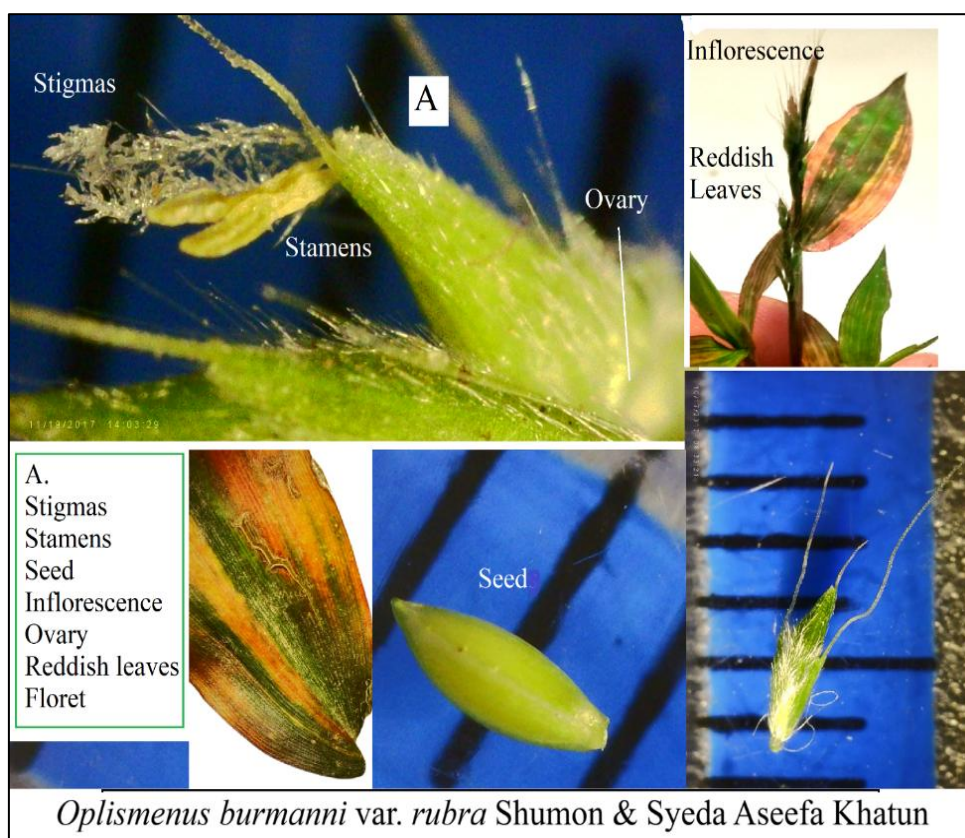
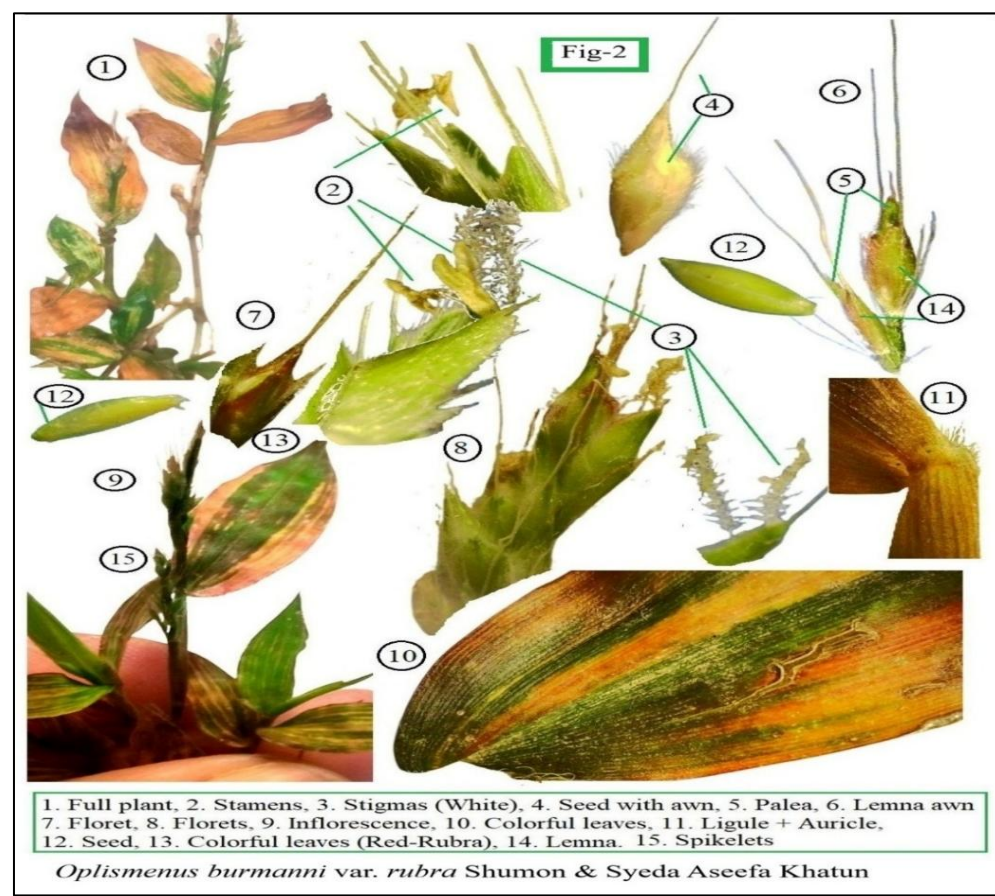
Oplismenus burmanni var. *rubra* Shumon & Syeda Aseefa Khatun, nov. p-5, Fig-1,2

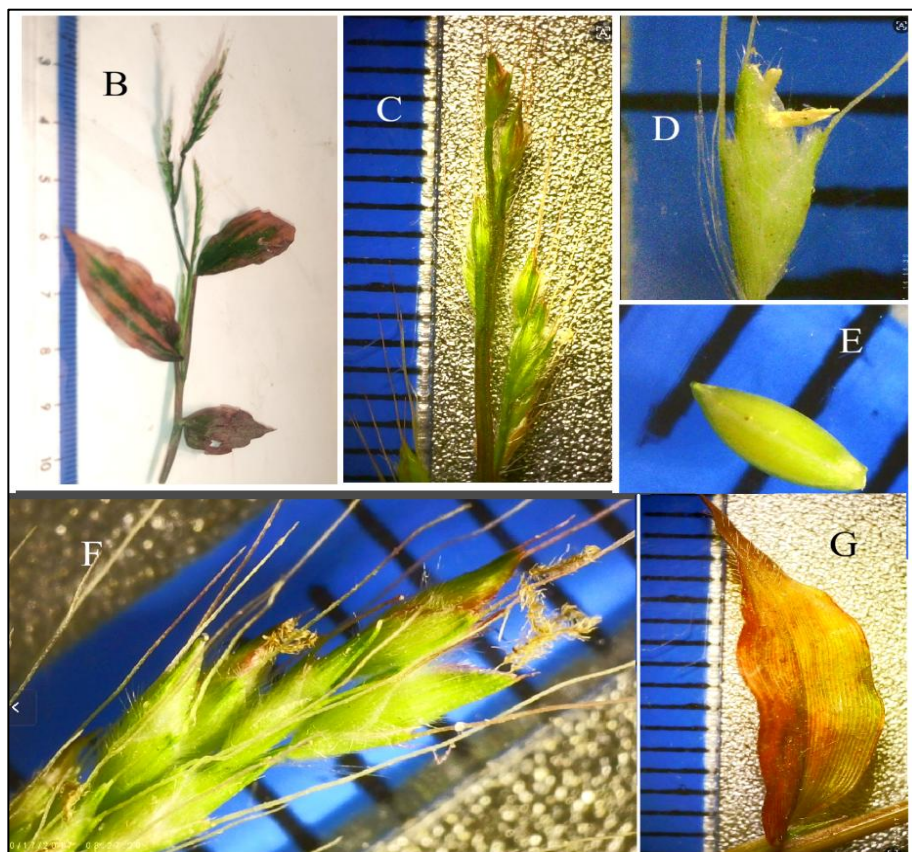
TYPE: RDA campus, Bogura, Bangladesh, is located approximately

is located at approximately 24.704° N latitude and 89.395° E longitude.

Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 351 (AAHBAU).





B. Habit, C. Inflorescence with scale, D. Anther size with scale, E. Seed with scale, F. Stigmas with scale, G. Reddish leaf with scale.

Oplismenus burmanni var. *rubra* Shumon & Syeda Aseefa Khatun



Oplismenus burmanni var. *rubra* Shumon & Syeda Aseefa Khatun

CONCLUSION

Oplismenus burmanni var. *rubra* Shumon & Syeda Aseefa Khatun (Fig-1,2) described as a new species from *Poaceae* family. Which is differs from *Oplismenus burmanni*, reddish leaves. Sometimes variegated with red tinged. Small in size. Small inflorescence.

REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:329520-2>
2. Govaerts, R.H.A. (2011). World checklist of selected plant families database update import Facilitated by the Trustees of the Royal Botanic Gardens, Kew.
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30000032-2>
4. Acevedo-Rodríguez, P. & Strong, M.T. (2012). Catalogue of seed plants of the West Indies. Smithsonian Contributions to Botany 98: 1-1192.
5. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30453766-2>

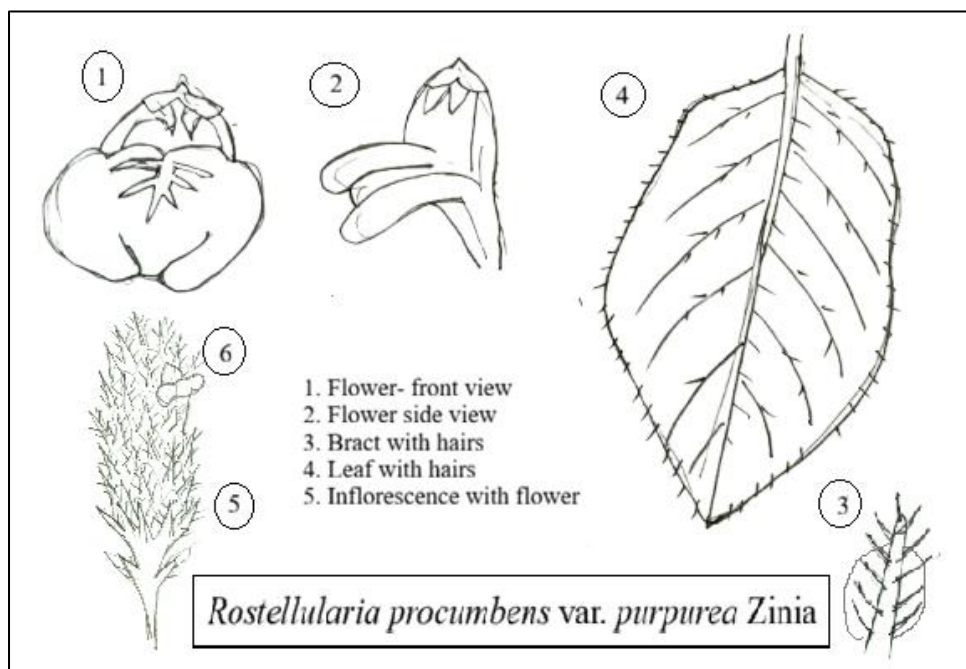
11. *Rostellularia procumbens* var. *purpurea* Zinia

English name – Purple Justicia, Zinia's Justicia.

Bengali name – বেগুনী পাপরা, জিনিয়ার কালমাশী

INTRODUCTION

Rostellularia procumbens (L.) Nees. First published in A.P.de Candolle, Prodr. 11: 371 (1847). *Rostellularia* Rchb. First published in Handb. Nat. Pfl.-Syst.: 190 (1837). Includes 25 Accepted Species. *Acanthaceae* Juss. First published in Gen. Pl. Paris. 102. 1789 [4 Aug 1789] (1789) nom. cons. Includes 209 Accepted Genera.



Description

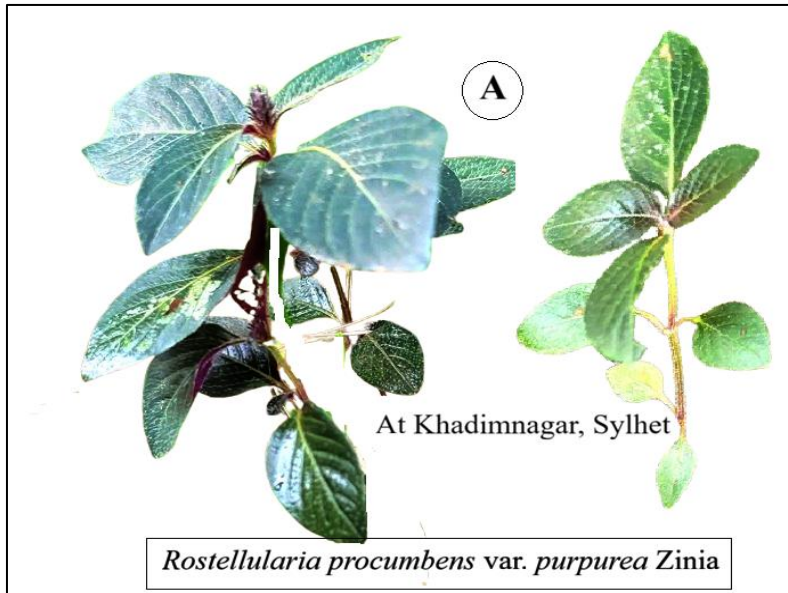
It is a slender, often tufted, ascending, not branched, perennial herb. Height 7-8 cm. The leaves are elliptic to oblong-ovate or ovate, 7-8 cm long, 1.5 cm wide, obtuse at both ends, and entire or slightly crenate as to margin. Hairs on leaves and veins. Purple color underneath the leaves. The flowers are pink, 3-4 mm long, and borne in terminal, rather dense, cylindric spikes 1-2.5 cm long inflorescence and about 7-8 mm in diameter.

The bracts and sepals are blackish purple, linear-lanceolate, and hairy. 2 stamens with filaments measuring approximately 2 mm in length. Stigma is described as minutely 2-lobed (or shortly 2-cleft/bifid) sitting atop a slender, pubescent style that measures approximately mm long.

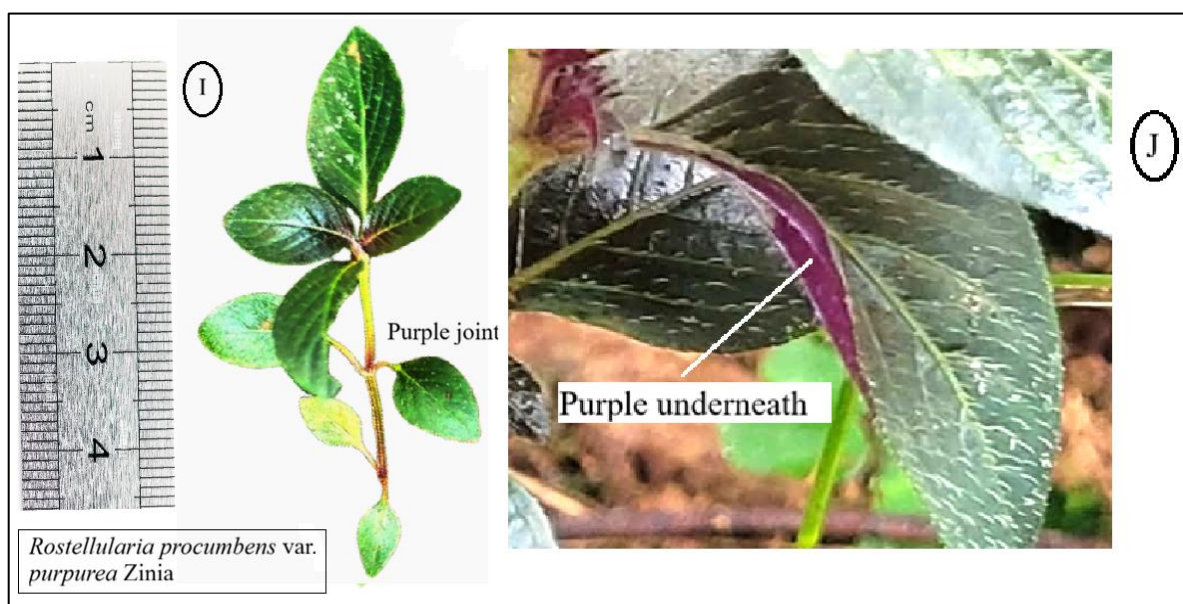
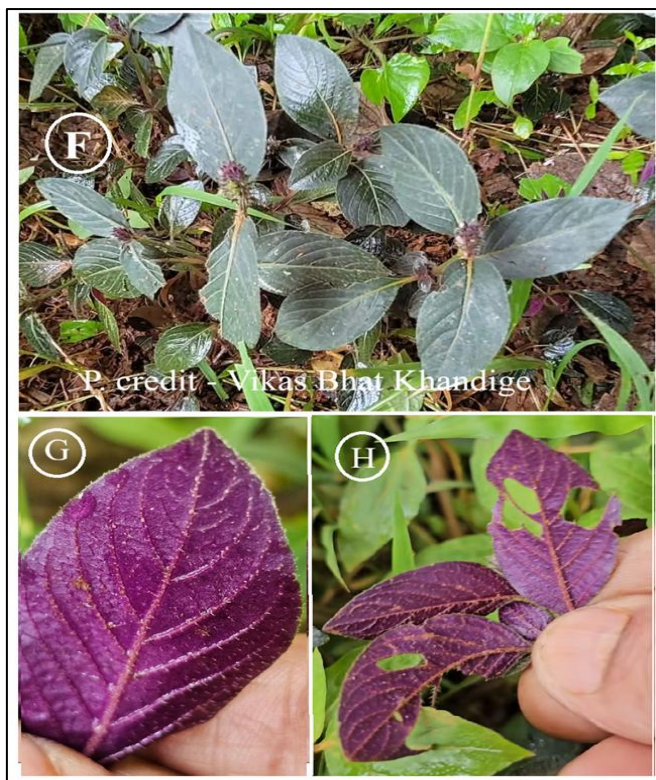
It is found in Bangladesh (Sylhet - Hilly area) India (Karnataka) at altitudes up to 700 m.

Specimen Examined

Zinia Nasrin Shumon, Herbarium sheet number – ZNS 352 (AAHBAU).



Rostellularia procumbens var. *purpurea* Zinia



Keywords

Acalypha, Euphorbiaceae, Acemella, Begum Rokeya, Zinia, Ageratum, Aphanamixis, Meliaceae, Campanula, Miraz, Campanulaceae, Dischidia, Apocynaceae, Justicia, acanthaceae, Mycetia, Shumon, Zarif, Oplismenus, Poaceae, Rostellularia, New species, Bangladesh.

ACKNOWLEDGMENT

Thanks to Mr. Vikas Bhat Khandige, an independent researcher for his photos from hilly area Karnataka, India.

CONCLUSION

Rostellularia procumbens var. *purpurea* Zinia from *Acanthaceae* family, described (Fig-1,2) as a new species.

Size small and purple color underneath the leaves. Flowers are different from other *Rostellularia* species. Colors also. Purple color in stem joint. Black-purple bracts with long spine like hairs. Hairs on leaves and midrib.

Materials and Method

Representative specimens (fertile twigs containing flowers, fruits, or spores) were collected and prepared using standard herbarium techniques (pressing, drying, and treating with chemicals to prevent deterioration). Listing the relevant regional floras, taxonomic revisions, monographs, and keys consulted to confirm the plant's identity and determine its differences from closely related species.

REFERENCES

1. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:53735-1>
2. Wu, Z. & Raven, P.H. (eds.) (2011). Flora of China 19: 1-884. Science Press (Beijing) & Missouri Botanical Garden Press (St. Louis).
3. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:880-1>
4. Govaerts, R., Nic Lughadha, E., Black, N., Turner, R. & Paton, A. (2021). The World Checklist of Vascular Plants, a continuously updated resource for exploring global plant diversity. <https://doi.org/10.1038/s41597-021-00997-6>. Scientific Data 8: 215.
5. <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:30000618-2>