

# FLORA OF BANGLADESH

NO. 54

MALVACEAE

EDITOR

M. MATIUR RAHMAN

July 2003

By

M. SALAR KHAN  
And  
SAKHAWAT HOSSAIN

BANGLADESH NATIONAL HERBARIUM  
MINISTRY OF ENVIRONMENT AND FOREST  
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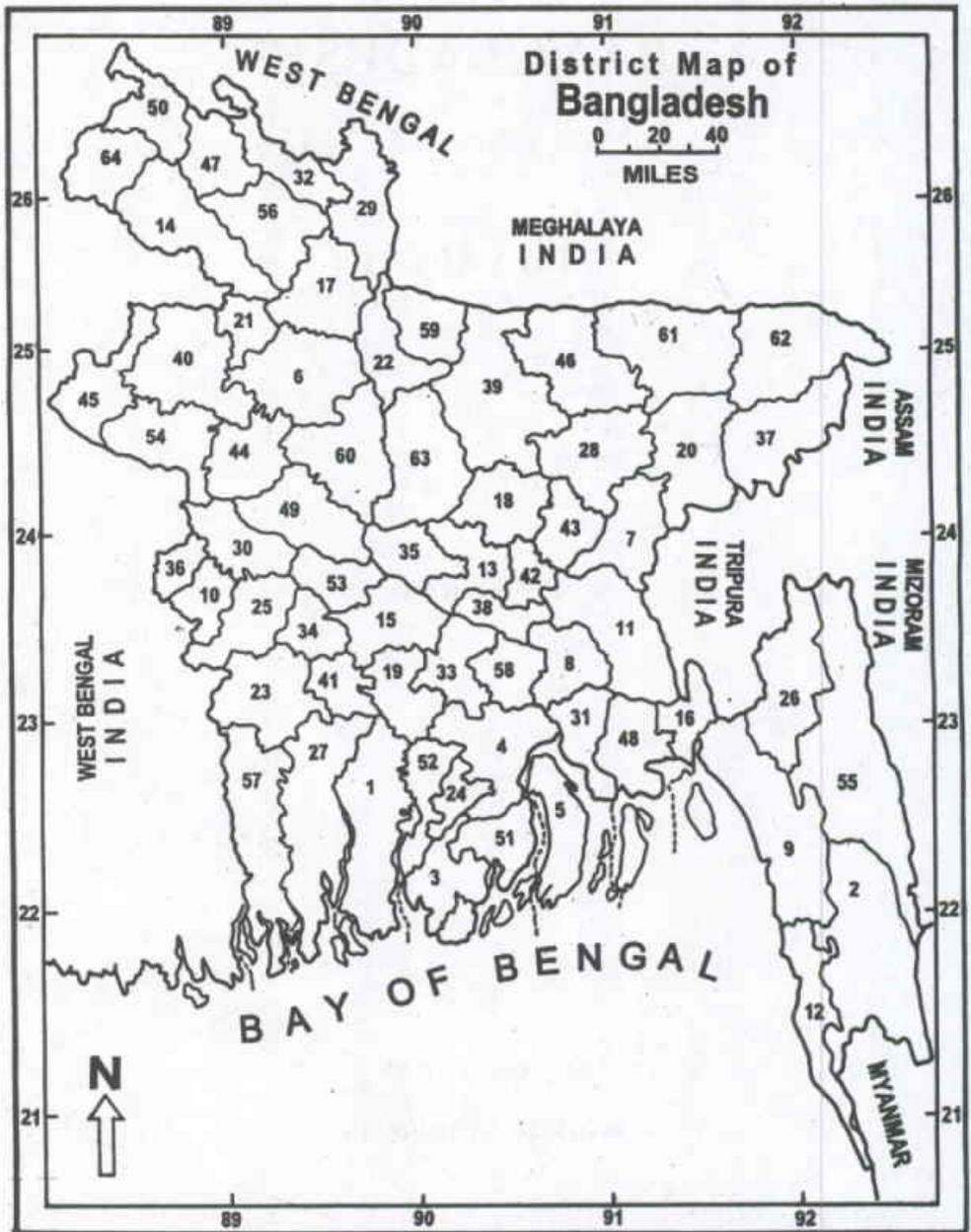
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## List of Districts

The serial numbers correspond to those given in the map.

- |                  |                  |
|------------------|------------------|
| 1. Bagerhat      | 33. Madaripur    |
| 2. Bandarban     | 34. Magura       |
| 3. Barguna       | 35. Manikganj    |
| 4. Barisal       | 36. Meherpur     |
| 5. Bhola         | 37. Moulvi Bazar |
| 6. Bogra         | 38. Munshiganj   |
| 7. Brahamanbaria | 39. Mymensingh   |
| 8. Chandpur      | 40. Naogaon      |
| 9. Chittagong    | 41. Narail       |
| 10. Chuadanga    | 42. Narayanganj  |
| 11. Comilla      | 43. Narsingdi    |
| 12. Cox's Bazar  | 44. Natore       |
| 13. Dhaka        | 45. Nawabganj    |
| 14. Dinajpur     | 46. Netrakona    |
| 15. Faridpur     | 47. Nilphamari   |
| 16. Feni         | 48. Noakhali     |
| 17. Gaibandha    | 49. Pabna        |
| 18. Gazipur      | 50. Panchagarh   |
| 19. Gopalganj    | 51. Patuakhali   |
| 20. Habiganj     | 52. Pirojpur     |
| 21. Jaipurhat    | 53. Rajbari      |
| 22. Jamalpur     | 54. Rajshahi     |
| 23. Jessore      | 55. Rangamati    |
| 24. Jhalakati    | 56. Rangpur      |
| 25. Jhenaidaha   | 57. Satkhira     |
| 26. Khagrachari  | 58. Shariatpur   |
| 27. Khulna       | 59. Sherpur      |
| 28. Kishoreganj  | 60. Sirajganj    |
| 29. Kurigram     | 61. Sunamganj    |
| 30. Kushtia      | 62. Sylhet       |
| 31. Lakshmipur   | 63. Tangail      |
| 32. Lalmonirhat  | 64. Thakurgaon   |

## MALVACEAE

M.S. Khan and Sakhawat Hossain

Annual or perennial herbs and shrubs, rarely trees with soft wood (*Thespesia*, *Hibiscus mutabilis*, *Hibiscus tiliaceus*). Plant body usually with stellate hairs, sometimes simple hairy or glandular hairy (*Gossypium*) or glabrescent, all parts of the body with abundant mucilaginous sap, rarely with acid juice (*Hibiscus sabdariffa*). Inner bark tenacious in presence of tough bast fibers. Root branched, tap root. Stem erect, simple or branched, herbaceous or woody, decumbent (*Sida*), sometimes a woody climber (*Hibiscus scandens*). Leaves simple, petiolate, ovate or orbicular, entire, lobed, parted or variously dissected, serrate to crenate, base cordate, sometimes cuneate, tip acute to acuminate, sometimes emarginate, venation pinnately reticulate, usually multicostate, surface hairy or glabrous; stipules free, lateral but in most cases caducous, linear-lanceolate, foliaceous (*Hibiscus surattensis*, *Malva*), filiform (*Abelmoschus*), hairy. Inflorescence rarely an axillary cyme (*Malachra capitata*) or cymose-paniculate (*Abutilon*, *Wissadula*), or fascicled (*Malva*) but in most cases the flower solitary in the axil of the leaf, sometimes in terminal racemes (*Abelmoschus hostilis*, *Alcea rosea*). Flower usually large, often showy, pedicellate, rarely sessile (*Alcea*), pedicel jointed, bracteate or ebracteate, complete, rarely polygamous as in *Kydia* (Paul and Nayar 1988), actinomorphic, hypogynous. Epicalyx of bracteoles 3-16 to many in number, free or connate, sometimes epicalyx absent (*Abutilon*, *Sida*, *Wissadula*). Calyx usually campanulate with apical teeth, sepals usually 5, free or united basally, valvate, persistent, green, yellowish or reddish, sometimes irregularly by 2-3 lobed, spathaceous and caducous with petals (*Abelmoschus*), hairy, spiny or glabrous, sometimes multicostate with a nectary on the middle nerve. Corolla convolute (twisted), connivent, campanulate or rotate, coloured and showy, yellow, white, red or maroon in various shades, in most cases the corolla with a dark purple centre (eye). Petals usually 5, distinct or basally fused to the androecium (staminal tube) and fall with the tube when flower withers, the limb of petals usually asymmetric, margin of petal base sometimes hairy. Stamens numerous, monadelphous, attached to the base of petals surrounding the pistil but apically distinct, the tube truncate or toothed, antheriferous throughout the length or upper portion only, filaments equal in size or unequal, gradually shorter towards the apex like a pyramid (*Gossypium*, *Thespesia*), anthers unilocular, reniform, sinuous or straight, dorsifixed, dehiscing longitudinally, pollen large, spheroidal, spiny, porporate. Ovary superior, 3-many locular, entire or lobed, ovules 1 to many in each cell on axile placentation. Style 1, long, passing through the staminal tube, apically branched or unbranched (*Gossypium*, *Thespesia*), stylar branches terminating in stigmas as many as or twice the number of locules. Stigma usually capitate, rarely linear, peltate or discoid. Fruit a shizocarp consisting of 5 to many mericarps or a loculicidal capsule; shizocarp a carcerulus (*Alcea*, *Malva*, *Malvastrum*,

## LIST OF FAMILIES PUBLISHED

	Fl. No.		Fl.No.
Aizoaceae	34	Martyniaceae	1
Annonaceae	52	Menispermaceae	51
Asclepiadaceae	48	Menyanthaceae	49
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Avicenniaceae	31	Moringaceae	2
Basellaceae	2	Nymphaeaceae	9
Bixaceae	35	Ochnaceae	3
Buddlejaceae	13	Onagraceae	6
Burmanniaceae	38	Orobanchaceae	21
Burseraceae	36	Oxalidaceae	15
Butomaceae	2	Pedaliaceae	2
Cannabidaceae	14	Peperomiaceae	37
Caricaceae	1	Periplocaceae	47
Cassythaceae	43	Phytolaccaceae	1
Casuarinaceae	1	Plumbaginaceae	42
Ceratophyllaceae	10	Polemoniaceae	2
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Elatinaceae	39	Solanaceae	53
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Fumariaceae	3	Sphenocleaceae	5
Haloragaceae	8	Stemonaceae	41
Hydrocharitaceae	28	Stylidiaceae	32
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Hydrophyllaceae	1	Tropaeolaceae	3
Juncaceae	29	Turneraceae	3
Linaceae	26	Xyridaceae	46
Loranthaceae	33	Zannichelliaceae	11
Malvaceae	54	Zygophyllaceae	16
Martyniaceae	1		

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