



Official Name	Nimba	
English Name	Indian Lilac	
Botanical Name	<u>Azadirachta indica</u>	
Family	Meliaceae	
Taxonomical classification	Kingdom- Plantae SubKingdom- Viridiplantae Superdivision- Spermatophyta Division- Magnoliophyta Class- Magnoliopsida Subclass- Rosidae Order- Sapindales Family- Meliaceae Genus- Azadirachta Species- indica	
Synonyms	नीम, मिम्ब, मानिग्रम, अरिष्ट, विनुमई, सेहून	
Habitat	The neem plant is native to the Indian Subcontinent but is now widely cultivated in tropical and Subtropical regions worldwide	
Botanical Identification	Habit - *Native Range*: Indian subcontinent, Southeast Asia, and parts of Africa - *Introduced Range*: Tropical and subtropical regions around the world, including Africa, Australia, and the Americas	

	Root	Deep taproot system with lateral roots	
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	Stem/Bark.	gray bark with vertical fissures	
	Leaves	Phyllotaxy	alternate
		Simple/Compound	Compound
		Lamina	- Shape: Ovate or lanceolate - Margin: Toothed - Apex: Acute - Base: Unequal - Color: Green - Venation: Compound
		Texture	Leathery and slightly rough
		Tip	Acute (Sharply pointed)
		Base	Slightly asymmetric or Oblique
		Margins	Serrated (toothed edges)
		Venation	Reticulate (net-like pattern)
		Petiole	- Length: Short (about 1-2 cm) - Thickness: Thin - Texture: Smooth - Color: Green - Winged: No - Jointed: No
			

	Inflorescence		Type Axillary panicle (Abranched cluster of flowers arising from the leaf axils)	
	Flower		Type- Bisexual (perfect flower)	
	Floral formula/ Diagram			 <p data-bbox="1050 1120 1460 1160"><u>Floral diagram: Azadirachta indica</u></p> <p data-bbox="1077 1198 1508 1243"><u>Floral formula- $B_{r} \oplus \hat{\sigma} K_{(5)} C_{5} A_{(10)} \overline{G}_{(3)}$</u></p>
	Fruit		<p data-bbox="798 1400 1013 1747">The fruit of neem plant is a Drupe, which contains a single seed used for oil extraction and medicinal purposes Drupe (freshy fruit with hard seed inside)</p> <p data-bbox="798 1825 981 1915">Drupe (freshy fruit with hard seed inside)</p>	

Types		
Raspanchaka	<ul style="list-style-type: none"> • रस- तिक्त • गुण- लघु, रुक्ष • वीर्य- शीत • विपाक-कटु • दोषकर्म- वातवर्धक 	
Chemical Constituents in nimba	Class of Constituents	Compounds present in class
	Alkaloids	
	A)Anthraquinones	Absent
	B) carbohydrates	<ol style="list-style-type: none"> 1. Monosaccharides – Glucose, fructose, Mannose 2. Disaccharides -Sucrose <p>3 Polysaccharides – Cellulose, Hemicellulose, Pectin, Mucilage, Gum</p>
	C) Enzymes	<ol style="list-style-type: none"> 1. Oxidoreductases <ul style="list-style-type: none"> • Peroxidase (POD) • Catalase (CAT) • Superoxide
	D) Inorganic compounds	<p>Nitrogen, Phosphorus, Potassium, Calcium, Magnesium, Sulphur, Iron, Zinc, Manganese, Boron, Silica, Sodium, Chlorides</p>
	Other constituents	

Market Information	The neem is growing due to its Application in agriculture , pharmaceuticals, personal Care & animal feed. The global neem market was value at around \$ 1.2 billion	
Adulteration/Substitution	Karanja all, palm oil, castor oil	
Cultivation	Grows well is hot, arid and Semi-arid Climates with temperature b/w 25-40 c soil Well drained sandy or loamy soil with PH of 6.5-7.8.	
Flowering season	Flowering Season In India & tropical regions - March to May In Subtropical area - April to June	
Harvesting	Harvesting Neem can be harvested for its leaves. Seeds, bark and oil .	
Present status- Not concerned/Endangered/Extinct	Nimba, also known as Neem, is currently not considered endangered or extinct. In fact, it is widely cultivated and naturalized in many tropical and subtropical regions around the world. Its native range includes the Indian subcontinent and parts of Southeast Asia, but it has been introduced to other areas, such as Africa, the Americas, and Australia, where it has become naturalized.	
Conservation method	1. *Seed Banking*: Collecting and storing Nimba seeds in seed banks to preserve genetic diversity. 2. *Nursery Establishment*: Establishing nurseries to cultivate Nimba saplings, which can be used for reforestation and afforestation efforts.	
Main uses	कृमिघ्न, दीपन-पाचन, कण्डुघ्न, विषनाशक, शीतल , वात-कफ नाशक, ज्वरघ्न	
Part used	मूल. Leaves, Bark, flower, Fruits, Seeds,	
Dose		- Nimbu juice: 10-20 ml - Nimbu powder: 1-2 grams - Nimbu oil: 2-5 drops
Antidote or Treatment	Gastric lavage Activated Charcoal IV Fluids, Electrolytes	
Purification (if any)		
Formulations : निम्बादि चूर्ण	Rogadhikara: प्रमेह, अग्निमांद्य,ज्वर	Reference भैषज्य रत्नावली

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