



Official Name		एरंड	
English name		Castor	
Botanical Name		<i>Ricinus communis</i> Linn.	
Family		Euphorbeaceae	
Taxonomical classification		Kingdom - plantae Sub kingdom - phanerogamae Division -angiospermae Class - dicotyledonae Sub class - archichlamydae Family - euphorbiaceae Genus - Ricinus Species - communis	
Synonyms		<p>1) पंचांगुल - The leaf resembles that of a palm of 5 fingers</p> <p>2) एरंड-The leaf resembles that of a palm of 5 fingers . By balancing vata dosha castor relieves stiffness and promotes movement</p> <p>3) वर्धमान -Grows quickly</p> <p>4) उरूबूका-One which removes aggravated vayu</p> <p>5) व्याघ्रपुच्छ - Flower bunch resembles like a tail of a tiger</p> <p>6) वातहारी-Because it decreases vata in our body</p> <p>7) व्यादंबक -Drug acting as mala shodhaka</p> <p>8) उत्तानपत्रक -Drug acting as mala shodhaka</p> <p>9) दीर्घदंड- Petioles are very long</p> <p>10) हस्तिकर्म Leaves are big</p>	
Habitat		Found throughout India (tropical and subtropical regions),Middle East and north eastern Africa	
Botanical Identification	Habit	Perennial shrub or small tree	
	Root	Tubular tap root Thick and horizontal roots	

	Stem/Bark	<p>Aerial , erect , herbaceous , smooth , woody, below branched ,round Hollow young branches are covered with hair like outgrowth . frequently red with clear sap . growing upto 4m high .</p>																			
	Leaves	<table border="1"> <tr> <td data-bbox="501 465 772 506">Phyllotaxy</td> <td data-bbox="772 465 1134 506">Alternate</td> </tr> <tr> <td data-bbox="501 506 772 577">Simple/Compound</td> <td data-bbox="772 506 1134 577">Simple</td> </tr> <tr> <td data-bbox="501 577 772 618">Lamina</td> <td data-bbox="772 577 1134 618">Smooth and serrate</td> </tr> <tr> <td data-bbox="501 618 772 658">Texture</td> <td data-bbox="772 618 1134 658">Glabrous</td> </tr> <tr> <td data-bbox="501 658 772 698">Tip</td> <td data-bbox="772 658 1134 698">Pointed</td> </tr> <tr> <td data-bbox="501 698 772 739">Base</td> <td data-bbox="772 698 1134 739">Hestate</td> </tr> <tr> <td data-bbox="501 739 772 779">Margins</td> <td data-bbox="772 739 1134 779">Lobed , serrate</td> </tr> <tr> <td data-bbox="501 779 772 819">Venation</td> <td data-bbox="772 779 1134 819">Palmately Reticulate</td> </tr> <tr> <td data-bbox="501 819 772 842">Petiole</td> <td data-bbox="772 819 1134 842">Long petioles</td> </tr> </table>	Phyllotaxy	Alternate	Simple/Compound	Simple	Lamina	Smooth and serrate	Texture	Glabrous	Tip	Pointed	Base	Hestate	Margins	Lobed , serrate	Venation	Palmately Reticulate	Petiole	Long petioles	
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	Inflorescence	<p>Compound raceme or panicle and terminal . Male flowers are seen below and female flowers near the apex.</p>																			
	Flower	<p>Monocious</p> <p>Male flower - bracteate, ebracteate, Pedicellate, Actinomorphic, Incomplete</p> <p>Perianth - Tepal 5 ,arranged in single whorl gamophyllous valvate aestivation and odd tepal is posterior in position</p> <p>Androecium - Stamens are many ,polyadelphous , filaments branched and United to form 5 branches. Anthers are ditheous , globose , basified , introse and dehiscing by longitudinal slits .</p> <p>Gynoecium - Absent but pistillode is present</p> <p>Female flower - Bracreate, ebracteate, pedicellate , actinomorphic , incomplete , hypogenous</p>																			

Adulteration/Substitution		Adulterated with sunflower oil (<i>Helianthus annuus Linn.</i>)
Cultivation		Propagated through seeds and Sown during June and July
Flowering season		October -January
Harvesting		Mid - September
Present Status- Not concerned/ Endangered/ Extinct		Not concerned
Conservation method		
Main Uses		वेदनस्थापन गुल्महर अनिलपहा यकृदहर उदरहर अर्शनुत मूत्रदोषहर बास्तिशूल हर कृमिहर
Part used		Root , leaf , seed , oil
Dose	Medicinal Dose	 Castor oil-5-10mL(API)  root powder-3-5gms(API)  seed-1-5gms(API) decoction-50-100ml(API)
	Toxic Dose	5-10 crushed seeds
	Fatal Dose	Ricin (chemical compound found in erand) blocks the protein synthesis through the inhibition of RNA polymerase . Ricin has a special binding effect that allows it to gain access to the endoplasmic reticulum in the gut mucosal cell causing severe diarrhea . - Symptoms if inhaled- cough, wheezing, dyspnea, sore throat, congestion, pulmonary oedema, pneumonia -Symptoms if ingested - nausea , vomiting, diarrhoea , hematemesis , melena , necrosis of spleen liver and kidneys
Toxicity (if any)		Neurotoxic and nephrotoxic . Due to principle toxic substances ricin and albumin.
Antidote or treatment (if any)		there is no antidote for ricin its treatment includes gastric lavage , activated charcoal , demulcents , symptomatic treatment .
Purification (if any)		Seeds are fomented in coconut water for 3 hours . Then seeds are washed and dried in sunshine.

Formulation	Formulation	Rogadhikara	Reference
	1) एरंडादि काथ	वात व्याधि स्त्रीरोग वात रक्त	योग रत्नाकर रस रत्नाकर भावप्रकाश
	2) एरंड सप्तकम	शूल	हरीत संहिता
	3) चतुर्मुख रस	वात व्याधि	रस रत्न समुच्चय
	4) गन्धर्व हस्तादि तेल	वृद्धि	रस चिंतामणि भैषज्य रत्नावली
	5) एरंडादि गुटिका	आम वात	बृहत्निघंटुरत्नाकर बृहत्योगरात्नकर
	6) एरंडादि कल्क	अशमरी	योगरात्नकर
	7) एरंडादि योग	गुल्म	सुश्रुत संहिता
Special information (if any)	Seeds of this plant are highly toxic due to the presence of ricin in them . It is the most poisonous plant in the world .		