



# Ericaceae Family Medicinal & Other Uses of their Genera List and their Species

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## Abstract

This Ericaceae family plants are Heath or heather family. This family contains the 4250 known species spread across 124 genera. In this article contain the characteristics of the plant, medicinal uses and other uses of the Ericaceae family & their genera list and species, these plants use brain disorders, nervous disorders, urinary disorders, heart disease, and also plants are used for garden and wood are also used and some plants are used in cookies.

**Keywords:** Grayanotoxins; Nectar; Depolarization; Vagal; Dysrhythmias; Stipules; Calyx; Sapless Petals; Corolla; Spikes; Solitary

## Introduction

The Ericaceae are family of flowering plant, commonly known as the Heath or heathery family, found most commonly in acid and infertile growing condition. The family is large, with 4250 known species spread across 124 genera, making it the 14<sup>th</sup> most species rich family of flowering plants [1].

## Classification

Kingdom: Plantae  
Sub kingdom: Tarcheobionta  
Super division: Spermatophyta  
Division: Magnoliophyta  
Class: Magnoliopsida  
Subclass: Dileniidae  
Order: Ericales  
Family: Ericaceae [2,41]

## Characteristics of the Plant Family

**Leaves, Stem, Roots:** Many members of this family are evergreen shrubs or climbers, with woody stems. The leaves are simple without stipules, usually alternative, and are often thick, leathery

and shiny. Species growing in dry conditions often have thick needle-like leaves.

**Flower:** There is a calyx four or five sepals joined based. The flower has four petals, usually joined to form a tube or trumpet. There are usually twice as many stamens as petals, and they are not attached to the corolla. There is a single style. The flowers are usually in clusters or spikes, but may be solitary.

**Seeds:** The ovary is usually superior but may be inferior. The fruits are usually capsules or berries.

### Members of this Family usually have

**Woody stems:** Simple evergreen leaves growing alternately in clusters of flowers. Stamens not attached to the flower tube and are found in acidic condition.

## Etiology and Pathophysiology

Members of the Ericaceae contain numerous diterpenoids called grayanotoxins. Toxins are all parts, including Grayanotoxins attach to sodium channels, preventing their inactivation and prolonging depolarization and excitation of cells. The compromised sodium channels allow calcium influx into the cells that has a positive isotropic effect similar to digitalis at low doses. Vagal over stimulation causes hypotension and bradycardia. Impaired cardiac conductivity leads to dysrhythmias and heart block Table 1.

Table 1:

Genera	Sub- Family	Types of Species	Number of Specie	Medicinal Uses of Genera/Species	other Uses
<i>Enkianthus</i> Louis. [1]	Enkiathonoidea	<i>Enkianthus quinqueflorus</i>	16	Ornamental plant	Air fresher, decoration, showy purposes, traditional medicine, usea
<i>Chimaphila</i> Pursh [2]	Pyrolloideae	<i>Chimaphila maculata</i> (London.)	5	Bladder stone's spasms, fluid retention, seizures anxiety, cancer, sores, whe n, fever, as-tringent, cardiac, applied to the skin tonic, antiseptic.	Food and beverages and flavouring agent.
<i>MONE SLESSI B. EX SO. FOR. GRAY</i> [3]	Pyrolloideae	<i>Moneses grandiflora</i> Salisb. ex safeguard	1	Cough and cold, swelling, pain, sores throgt	-
<i>PYROLAL.</i> [4]	Pyrolloideae	<i>Pyrol rotunda</i> foliage L.	Ca n.30	Cardiac, kidney disease, diaphoretic, antibacterial, diaphoretic, diuretic, stimulant and tonic, gonorrhoea, skin disease, chronic rheumatism, inflammation of urinary system.	Drinks and many ointments, plasters, deco tion used for some diseases.
<i>ORTHILIA</i> Rafael. [5]	Pyrolloideae	<i>Orthilia Parva</i> foliage Rafael.	1	Sterility, bleeding, infantile small, cervical erosion, toxicities, diu ritics, antiseptic, anti-inflammatory, myoma, fibromyoma	
<i>ALLOTROPATORR &amp; GRAY</i> [6]	Monotropeoidea	<i>Allotrop virgata</i> Torr. Angary.	1	Digestive disorder & cough & cold arthritis, rheumatism	-
<i>MONOTROPA</i> [7]	Monotropeoidea	<i>Monotropa uniflora</i> L.	2	Sedative, tonic, nervine, antispasmodic,	-
<i>Pterospora</i> Nutt [8]	Monotropeoidea	<i>Pterospora</i> and <i>Rosedale</i> Nutt.	1	Lungs hemoharrag and nose bleeding gonorrhoea	Stem may used in cook and mushrooms
<i>Sarcodes</i> Torr [9]	Monotropeoidea	<i>Sarcodes sanguinea</i> Torr	1	Poisonous and laxative	Fungus provide mineral nutrients water protection from pathogens to the plant
<i>Arbutus</i> L. [10]	Arbutoideae	<i>Arbutus unedo</i> L.	10	Anti oxidant, sugars, beta carotenoid and niacin	Fire wood to make pipes and smelling flowers and
<i>Arctostaphylos</i> adan [11]	Arbutoideae	<i>Arctostaphylos uvaursi</i> (L.) Spreng	66	Black feet nation, tobacco, diuretics	Food plant like lepidotera
<i>Comarostaphylis</i> zucc - [12.13]	Arbutoideae	<i>Comarostaphylis arguab ly</i> zucc.	10	Diuretics, nausea vomiting	Garden use -
<i>Xylococcus</i> Nutt [14]	Arbutoideae	<i>Xylococcus bicolor</i> Nutt.	1	Non-toxic, no medicinal uses	Use to make cider like drink or jellies and sauces
<i>Cassiope</i> D. Don [15;16]	Cassiopoeidae	<i>Cassiope tetragonal</i> (L.) D. Don	18	Cough, cold, incense, fever, tonsillitis, reduce blood pressure, inflammation	Insulation material in houses
<i>Corema</i> D. don [17]	Ericoidea	<i>Corema album</i>	2	Against parkinson, antioxidant activity, high nutritional value	Food ingredients, Beverages, jams
<i>Empetrum</i> L [18]	Ericoidea	<i>Empetrum nigrum</i>	18-Mar	Diarrhea, stomach pain, health sore eye	Natural food dye, mixed with lard
<i>Calluna</i> Salisb [19]	Ericoidea	<i>Calluna vulgaris</i>	1	Kidney and urinary disorders, heather honey	Food source for sheep and deep, dye wool yellow & tan leather, beverages
<i>Erica</i> L [20]	Ericoidea	<i>Erica cinerea</i>	85	Anti oxidant, hypertension, diuretic's, urinary antiseptic, against constipation, anti-inflammatory, anti-microbial, hyperlipidimia, atherosclerosis, alcoholic liver cirrhosis and cancer, antinociceptive.	Heather honey

<i>Epigaea</i> [21]	Ericoideae	<i>Epigaea repens</i>	3	Urinary antiseptic, cystitis, urethritis, prostatitis, bladder stones, acute eataarrhal cystitis, astringent, diuretics, tonic, kidney disorder, stomach ach	Dried later uses
<i>Kalmia</i> L. [22] [45]	Ericoideae	<i>Kalmia latifolia</i>	10	Angina pectoris, blindness, brights disease, dropsy, dysmenorrhoea, gastralgia, globus hystericus, gout, headache, heart, disease of lumbago neurologia, paralogia, ptosis, pregnancy, albuminuria of retinitis blism, sun head aches, syphili sore throat, tinnitus, tobacco, vomiting, skin disease.	Flowers yield honey
<i>Phyllocladus salisbii</i> [23]	Ericoideae	<i>Phyllocladus taxifolia</i>	8	Tuberculosis, spitting up blood	-
<i>Rhododendron Rhododendron</i> [24]	Ericoideae	<i>Rhododendron Rhododendron</i>	0	-	Rock garden raised bed or alpine house
<i>Rhododendron small</i> [25] [42]	Ericoideae	<i>Rhododendron ferrugineum</i>	1000+	Antioxidant, astringent, cough, headache, dysentery, diarrhoea, reduce the activity of NF- $\kappa$ B, poisonous, loss of appetite, treat menstrual disorders, vomiting	Make charcoal, for fuel, wood are used
<i>Andersonia</i> R.Br. [26]	Styphelioideae	None- designated	Ca. 50	Splenic disorder, astringent, tonic liver & spleen enlargement, headache, burning pains, stomach ach, vomiting.	-
<i>Sprengelia</i> Sm. [27]	Styphelioideae	<i>Sprengelia</i>	4	Antiseptic	Garden use
<i>Epacris caerulea</i> [28]	Styphelioideae	<i>Epacris longiflora</i> Cav.	30+	-	Garden plant, nectar eating birds, feature plant
<i>Acrothamnus</i> Quinn [29]	Styphelioideae	<i>Acrothamnus maccraei</i>	5+	-	Garden use, food - fruit
<i>Brachycome</i> Sond [30]	Styphelioideae	<i>Brachycome preissii</i> Sond	7	Hormone, root promoting chemical would probably advisable	Useful garden
<i>Leucopogon</i> R.Br. [31]	Styphelioideae	<i>Leucopogon lanceolatus</i>	150	-	Word-for- word making tool handles
<i>Lissanthe</i> R.Br. [32]	Styphelioideae	<i>Lissanthe strigosa</i>	7	-	Fruit pleasant to eat
<i>Monotoca</i> [33]	Styphelioideae	<i>Monotoca scoparia</i>	17	-	Wood hard, light and close grained making tool handles etc..
<i>Chamaedaphne</i> Moench [34]	Vaccinoideae	<i>Chamaedaphne calyculata</i>	1	Ornamental use, sun tea,	Food plant
<i>Leucotroche</i> D. Don [35] [43]	Vaccinoideae	<i>Leucotroche axillaris</i>	5	Itch and ring worm a parasiticide is obtained from the plant	-
<i>Pernettya</i> Goudich [36]	Vaccinoideae	<i>Pernettya empetrifolia</i>	-	Berries after eating hallucination, drunkenness, paralysis, & death, poisonous	Attractive fall, /spring flower, jam
<i>Agarista</i> D. Don [37]	Vaccinoideae	<i>Agarista nummularia</i>	Ca n.30	No medicinal uses	The bark used as a substitute for cork
<i>Pieris</i> D. Don [38]	Vaccinoideae	<i>Pieris forbesii</i> (Wall.) D. Don.	7	Highly toxic for animals	Borders and background plant
<i>Oxydendrum</i> Dc [39].	Vaccinoideae	<i>Oxydendrum arboreum</i>	1	Ornamental	Wood is used locally for handles and fuel
<i>Ceratostema</i> Just. [40] [44]	Vaccinoideae	<i>Ceratostema Peruvianum</i> Just. Funny, Gmel.	35	A decoction of the plant is drunk for the nerves	Food - fruit

## Conclusion

“ERICACEAE“ family plants used for Bladder stone’s spasms, fluid retention, seizures anxiety, cancer, fever, cardiac, tonic, antiseptic, antibiotic, anti-bacterial, sedative, stimulant, myoma, fibromyoma antiseptic Sterility, bleeding, infantile small, cervical erosion, toxicities, anti-inflammatory, Antioxidant, dysentery, diarrhea, reduce the activity of NF-kB, poisonous, loss of appetite, treat menstrual disorders, vomiting, burning pains, paralysis, decoction of the is drunk for the nerves. Berries after Eating Hallucination, Tuberculosis, spitting up blood , drunkenness, paralysis & death, poisonous flower ,jam and also used as ornamental ,wood is used locally for handles, flower yield honey. The bark use to make cider like drink or jellies and sauc, use to make cider like drink or jellies and sauces Borders and background plant.

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