

# A Encephalopathic

\*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Plant	# Chemicals	Total PPM
Acacia nilotica Babul	1	
Achillea millefolium Yarrow; Milfoil	1	68.0
Acinos suaveolens	1	
Actaea racemosa Black Snakeroot; Black Cohosh	1	
Agastache urticifolia Nettle-Leaf Giant Hyssop	1	2276.0
Agastache pallidiflora	1	
Agathosma betulina Buchu; Mountain Buchu; Honey Buchu	2	8220.0
Allium sativum var. sativum Garlic	1	104.0
Allium cepa Onion; Shallot	1	770.0
Alocasia macrorrhiza Giant Taro	1	24.0
Aloe vera Bitter Aloes; Aloe	1	44.0
Aloe spp. Aloe	1	
Althaea officinalis White Mallow; Marshmallow	1	1360.0
Amorphophallus konjac Konjac; Devil's Tongue; Umbrella Arum; Snake Palm; Elephant Yam; Leopard Palm	1	
Amorphophallus campanulatus Elephant-Foot Yam	1	36.0
Anacardium occidentale Cashew	1	4.0
Anethum graveolens Garden Dill; Dill	1	420.0
Angelica sinensis Dong Gui; Dang Qui; Chinese Angelica; Dang Gui; Dang Quai; Dong Quai	1	844.0
Annona muricata Soursop	1	10.0
Apium graveolens Celery	1	18.0
Arachis hypogaea Peanut; Groundnut	1	28.0
Arctium lappa Gobo; Great Burdock; Burdock	1	462.0
Arctostaphylos uva-ursi Uva Ursi; Bearberry	1	1438.0
Armoracia rusticana Horseradish	1	60.0
Asimina triloba Pawpaw	1	0.048
Aspalathus linearis Rooibos; Kaffree Tea; Red Bush Tea	1	
Asparagus officinalis Asparagus	1	1400.0
Avena sativa Oats	1	
Averrhoa carambola Carambola; Star Fruit	1	
Barosma betulina Buchu	2	8220.0
Berberis vulgaris Barberry	1	978.0
Bertholletia excelsa Paranut; Creamnut; Brazilnut-Tree; Brazilnut	1	10.0
Beta vulgaris Beetroot; Sugar Beet; Garden Beet; Beet	1	840.0
Brassica rapa Turnip; Rapini; Seven-Top Turnip	1	20.0
Brassica pekinensis Chinese Cabbage	1	84.0
Brassica oleracea var. italica Broccoli; Purple Cauliflower; Calabrese; Asparagus Broccoli; Heading Broccoli; Sprouting Broccoli; Cape Broccoli; Winter Broccoli	1	
Brassica oleracea var. capitata l. Red Cabbage; White Cabbage; Cabbage	1	
Brassica oleracea var. botrytis l. Cauliflower	1	354.0
Brassica oleracea Kohlrabi	1	0.16

Plant	# Chemicals	Total PPM
<i>Brassica napus</i> var. <i>napobrassica</i> Rutabaga; Swedish Turnip; Swede	1	2.0
<i>Calamintha nepeta</i> Calamint	1	
<i>Camellia sinensis</i> Tea	1	
<i>Capsicum frutescens</i> Spur Pepper; Red Chili; Cayenne; Tabasco; Hot Pepper; Chili	3	
<i>Capsicum annuum</i> Paprika; Cone Pepper; Cherry Pepper; Bell Pepper; Green Pepper; Sweet Pepper	3	
<i>Carica papaya</i> Papaya	1	
<i>Carthamus tinctorius</i> Safflower	1	168.0
<i>Carya ovata</i> Shagbark Hickory	1	5.2
<i>Carya illinoensis</i> Pecan	1	22.0
<i>Carya glabra</i> Pignut Hickory	1	15400.0
<i>Caulophyllum thalictroides</i> Blue Cohosh	1	1524.0
<i>Centaurea cyanus</i> Bachelor's Button; Cornflower	1	
<i>Centella asiatica</i> Pennywort; Gotu Kola	2	4120.0
<i>Chamaemelum nobile</i> Perennial Camomile; Garden Camomile; Roman Camomile	1	54.0
<i>Chondrus crispus</i> Irish Moss	1	710.0
<i>Chrysanthemum parthenium</i> Feverfew	1	12.0
<i>Cichorium intybus</i> Witloof; Succory; Chicory	1	
<i>Cichorium endivia</i> Escarole; Endive	1	336.0
<i>Cimicifuga racemosa</i> Black Cohosh; Black Snakeroot	1	452.0
<i>Citrus sinensis</i> Orange	1	330.0
<i>Citrus reticulata</i> Tangerine; Mandarin	1	30.0
<i>Citrus paradisi</i> Grapefruit	1	660.0
<i>Cnicus benedictus</i> Blessed Thistle	1	170.0
<i>Cocos nucifera</i> Nariyal; Coconut Palm; Cocotero (Sp.); Copra; Coconut; Kokospalme (Ger.)	1	14.4
<i>Colocasia esculenta</i> Taro	1	43.8
<i>Commiphora wightii</i> Guggul; Indian Bdellium-Tree	1	
<i>Coriandrum sativum</i> Cilantro; Chinese Parsley; Coriander	1	234.0
<i>Corylus avellana</i> Hazel; English Filbert; European Hazel; European Filbert; Cobnut	1	5.2
<i>Crataegus rhipidophylla</i> Hawthorn	1	
<i>Crataegus laevigata</i> Hawthorn; English Hawthorn; Woodland Hawthorn; Whitethorn	1	58.0
<i>Cucumis sativus</i> Cucumber	1	42000.0
<i>Cucumis melo</i> Cantaloupe; Persian Melon; Netted Melon; Melon; Muskmelon; Nutmeg Melon	1	154.0
<i>Cucurbita pepo</i> Pumpkin	1	22.0
<i>Cymbopogon parkeri</i> Skhabar	1	
<i>Cymbopogon citratus</i> Lemongrass; West Indian Lemongrass	1	1030.0
<i>Cypripedium pubescens</i> Ladyslipper	1	476.0
<i>Cyrtosperma chamissonis</i> Swamp Taro	1	126.0
<i>Daucus carota</i> Carrot	1	2100.0
<i>Dioscorea villosa</i> Wild Yam	1	
<i>Dioscorea</i> sp. Wild Yam	1	420.0
<i>Dioscorea alata</i> Winged Yam; Greater Yam	1	24.0
<i>Diospyros virginiana</i> American Persimmon	1	756.0

Plant	# Chemicals	Total PPM
<i>Dracocephalum thymiflora</i> Thyme-Flowered Moldavica	1	560.0
<i>Echinacea</i> spp Coneflower; Echinacea	1	25800.0
<i>Echinacea purpurea</i> Echinacea; Eastern Purple-Coneflower; Purple-Coneflower	1	
<i>Elsholtzia cristata</i> Furan Chemotype	1	
<i>Elytrigia repens</i> Couchgrass; Wheatgrass; Doggrass; Quackgrass; Twitchgrass	1	662.0
<i>Ephedra sinica</i> Chinese Ephedra; Ma Huang	2	126.0
<i>Equisetum arvense</i> Horsetail; Field Horsetail	1	756.0
<i>Erythroxylum coca</i> Coca	1	840.0
<i>Euphrasia officinalis</i> Eyebright	1	198.0
<i>Foeniculum vulgare</i> Fennel	1	112.0
<i>Fragaria</i> spp Strawberry	1	140.0
<i>Frangula purshiana</i> Cascara Sagrada; Cascara Buckthorn	1	198.0
<i>Fucus vesiculosus</i> Bladderwrack; Kelp	1	1262.0
<i>Genipa americana</i> Genipap; Jagua	1	80.0
<i>Gentiana lutea</i> Yellow Gentian; Gentian	1	582.0
<i>Glycine max</i> Soybean	1	120.0
<i>Glycyrrhiza glabra</i> Smooth Licorice; Licorice; Licorice-Root; Commom Licorice	1	364.0
<i>Harpagophytum procumbens</i> Devil's Claw; Grapple Plant	1	1878.0
<i>Hedeoma pulegioides</i> American Pennyroyal	1	55200.0
<i>Hedeoma drummondii</i> Drummond's Pennyroyal	1	14480.0
<i>Hibiscus sabdariffa</i> Indian Sorrel; Kharkadi; Malventee (Ger.); Sereni (Sp.); Acedera de Guinea (Sp.); Sorrel; Roselle; Rosa de Jamaica (Sp.); Jamaica Sorrel; Red Sorrel; Rosella (Ger.)	1	250.0
<i>Hordeum vulgare</i> Barleygrass; Barley	1	438.0
<i>Humulus lupulus</i> Hops	1	9.4
<i>Hydrangea arborescens</i> Smooth Hydrangea; Hydrangea	1	442.0
<i>Hydrastis canadensis</i> Goldenseal	1	650.0
<i>Inula helenium</i> Elecampane	1	
<i>Ipomoea batatas</i> Sweet Potato	1	16.0
<i>Juglans nigra</i> Black Walnut	1	467.8
<i>Juglans cinerea</i> Butternut	1	5.2
<i>Juniperus virginiana</i> Red Cedar	1	17600.0
<i>Juniperus communis</i> Common Juniper; Juniper	1	122.0
<i>Lactuca sativa</i> Lettuce	1	252.0
<i>Larrea tridentata</i> Chaparral; Creosote Bush	1	580.0
<i>Laurus nobilis</i> Bay Laurel; Bayleaf; Sweet Bay; Grecian Laurel; Bay; Laurel	1	
<i>Liquidambar styraciflua</i> Sweetgum; American Styra	1	6060.0
<i>Lobelia inflata</i> Lobelia; Indian Tobacco	1	502.0
<i>Lycopersicon esculentum</i> Tomato	1	3400.0
<i>Lycopus virginicus</i> Bugle	1	48.0
<i>Malus domestica</i> Apple	1	258.0
<i>Manihot esculenta</i> Tapioca; Yuca; Cassava	1	154.0
<i>Medicago sativa</i> Lucerne; Alfalfa	1	270.0
<i>Mentha x rotundifolia</i> Applemint	1	19440.0

Plant	# Chemicals	Total PPM
<i>Mentha x piperita</i> Peppermint	2	10654.0
<i>Mentha spicata</i> Hortela da Folha Miuda; Spearmint	2	950.0
<i>Mentha pulegium</i> European Pennyroyal	2	41300.0
<i>Mentha longifolia</i> Biblical Mint	1	53200.0
<i>Mentha arvensis</i> var. <i>piperascens</i> Cornmint; Japanese Mint; Field Mint	1	49920.0
<i>Mentha aquatica</i> Water Mint	1	306.0
<i>Micromeria thymifolia</i>	1	
<i>Micromeria myrtifolia</i> Topukcayi; Dagcayi; Haydarotu	1	
<i>Micromeria juliana</i>	1	
<i>Micromeria fruticosa</i> Zopha; Tea Hyssop; Zuta	1	
<i>Micromeria dalmatica</i>	1	
<i>Micromeria croatica</i>	1	
<i>Micromeria congesta</i> Kaya Yarpuzu	1	
<i>Minthostachys mollis</i> Muna; Tipo	1	
<i>Moldavica thymiflora</i> Thyme-Flowered Moldavica	1	
<i>Monarda russeliana</i> Russel's Monarda	1	998.0
<i>Monarda punctata</i> Horsemint	1	534.0
<i>Monarda fistulosa</i> Wild Bergamot	1	514.0
<i>Monarda didyma</i> Oswego Tea; Beebalm	1	240.0
<i>Monarda clinopodia</i> Clinopod Bergamot	1	242.0
<i>Musa x paradisiaca</i> Plantain; Banana	1	70.0
<i>Myrica cerifera</i> Wax Myrtle; Southern Bayberry; Bayberry; Candle-Berry	1	302.0
<i>Myrtus communis</i> Arrayan (Sp.); Mirto (Sp.); Myrte (Ger.); Myrtle	1	1420.0
<i>Nepeta racemosa</i> Catmint	1	
<i>Nepeta cataria</i> Catnip	2	500.0
<i>Nyssa sylvatica</i> Black Tupelo; Black Gum	1	6780.0
<i>Panax quinquefolius</i> American Ginseng; Ginseng	1	570.0
<i>Panax ginseng</i> Korean Ginseng; Ginseng; Chinese Ginseng; Oriental Ginseng	2	44.0
<i>Pastinaca sativa</i> Parsnip	1	70.0
<i>Petroselinum crispum</i> Parsley	2	412.0
<i>Phaseolus vulgaris</i> Dwarf Bean; Flageolet Bean; String Bean; Green Bean; Haricot; Snap Bean; Popping Bean; Navy Bean; Kidney Bean; Wax Bean; Black Bean; French Bean; Haricot Vert; Garden Bean; Field Bean; Haricot Bean; Pop Bean	1	2246.0
<i>Phaseolus lunatus</i> Lima Bean; Butter Bean	1	6000.0
<i>Phoenix dactylifera</i> Date Palm	1	128.0
<i>Pimenta dioica</i> Jamaica-Pepper; Allspice; Pimenta; Pimento; Clover-Pepper	2	220.0
<i>Pinus walliciana</i> Bhutan Pine	1	
<i>Pinus elliottii</i> Slash Pine	1	
<i>Pinus echinata</i> Shortleaf Pine	1	8400.0
<i>Pistacia vera</i> Pistachio	1	18.0
<i>Pisum sativum</i> Pea	1	48.0
<i>Plantago psyllium</i> Psyllium	1	68.0
<i>Polygonum multiflorum</i> Fleeceflower; Chinese Cornbind; Chinese Knotweed; Fo Ti; He Shou Wu	1	304.0
<i>Prunus serotina</i> Wild Cherry; Black Cherry	1	3960.0

Plant	# Chemicals	Total PPM
<i>Prunus persica</i> Peach	1	2186.0
<i>Prunus dulcis</i> Almond	1	20.0
<i>Prunus domestica</i> Plum	1	510.0
<i>Psidium guajava</i> Guava	1	
<i>Pycnanthemum virginianum</i> Virginia Mountain Mint	1	38048.0
<i>Pycnanthemum verticillatum</i> Whorled Mountain Mint	1	29190.0
<i>Pycnanthemum torreyi</i> Torrey's Mountain Mint	1	1640.0
<i>Pycnanthemum tenuifolium</i> Slenderleaf Mountain Mint	1	26880.0
<i>Pycnanthemum setosum</i> Setose Mountain Mint	1	39494.0
<i>Pycnanthemum pycnanthemoides</i> Typical Mountain Mint	1	68672.0
<i>Pycnanthemum pilosum</i> Pilose Mountain Mint	1	112000.0
<i>Pycnanthemum muticum</i> Muticous Mountain Mint	1	80500.0
<i>Pycnanthemum montanum</i> Montane Mountain Mint	1	1680.0
<i>Pycnanthemum loomisii</i> Loomis' Mountain Mint	1	168.0
<i>Pycnanthemum incanum</i> Hoary Mountain Mint	1	20672.0
<i>Pycnanthemum clinopodioides</i> Clinopod Mountain Mint	1	11968.0
<i>Pycnanthemum californicum</i> California Mountain Mint	1	57672.0
<i>Pycnanthemum beadleii</i> Beadle's Mountain Mint	1	7154.0
<i>Pycnanthemum albescens</i> White Mountain Mint	1	28566.0
<i>Pyrus communis</i> Pear	1	210.0
<i>Quercus velutina</i> Black Oak	1	868.0
<i>Quercus stellata</i> Post Oak	1	1680.0
<i>Quercus rubra</i> Northern Red Oak	1	1336.4
<i>Quercus phellos</i> Willow Oak	1	840.0
<i>Quercus alba</i> White Oak	1	2170.0
<i>Raphanus sativus</i> Radish	1	370.0
<i>Rheum rhabarbarum</i> Rhubarb	1	160.0
<i>Rhodymenia palmata</i> Dulse	1	1230.0
<i>Rhus glabra</i> Smooth Sumac	1	2010.0
<i>Rhus copallina</i> Dwarf Sumac; Winged Sumac	1	5060.0
<i>Ribes uva-crispa</i> Gooseberry	1	66.0
<i>Ribes rubrum</i> Red Currant; White Currant	1	200.0
<i>Ribes nigrum</i> Black Currant	2	130.0
<i>Rosa canina</i> Rose; Dog Rose; Dogbrier	1	
<i>Rosmarinus officinalis</i> Rosemary	1	4142.0
<i>Rubus idaeus</i> Red Raspberry; Raspberry	1	784.0
<i>Rubus chamaemorus</i> Cloudberry	1	50.0
<i>Rumex crispus</i> Sour Dock; Curly Dock; Yellow Dock; Lengua De Vaca	1	780.0
<i>Ruscus aculeatus</i> Butcher's Broom; Box-Holly	1	2620.0
<i>Salix alba</i> White Willow	1	134.0
<i>Salvia officinalis</i> Sage	1	230.0
<i>Sassafras albidum</i> Sassafras	1	4200.0

Plant	# Chemicals	Total PPM
<i>Satureja parvifolia</i> Small-Leaf Pampa Savory	1	
<i>Satureja odora</i> Scented Pampa Savory	1	
<i>Satureja grandiflora</i> French Savory	1	
<i>Satureja glabella</i> Smooth Savory	1	3100.0
<i>Satureja douglasii</i> Douglas' Savory	1	13390.0
<i>Satureja cilicica</i> Turkish Savory	1	
<i>Schisandra chinensis</i> Wu Wei Zi; Five-Flavor-Fruit; Schizandra; Chinese Magnolia Vine; Wu Wei Zu; Magnolia Vine	1	348.0
<i>Scutellaria lateriflora</i> Mad-Dog Skullcap; Scullcap	1	516.0
<i>Senna alexandrina</i> True Senna; Alexandran senna; Indian Senna	1	
<i>Silybum marianum</i> Milk Thistle; Lady's Thistle	1	534.0
<i>Smilax</i> spp Sarsaparilla	1	1490.0
<i>Smilax officinalis</i> Sarsaparilla	1	
<i>Solanum tuberosum</i> Potato	1	510.0
<i>Solanum melongena</i> Eggplant; Aubergine	1	32.0
<i>Sorbus aucubaria</i> Rowan Berry	1	150.0
<i>Spinacia oleracea</i> Spinach	1	540.0
<i>Spondias tuberosa</i> Umbu; Imbu	1	15.76
<i>Spondias dulcis</i> Ambarella	1	22.0
<i>Stellaria media</i> Chickweed; Common Chickweed	1	3920.0
<i>Stevia rebaudiana</i> Sweet Leaf of Paraguay; Ca-A-E; Stevia	1	144.0
<i>Symphoricarpos orbiculatus</i> Buckbush	1	8800.0
<i>Symphytum officinale</i> Comfrey	1	474.0
<i>Syzygium aromaticum</i> Clovetree; Clove	1	320.0
<i>Tabebuia heptaphylla</i> Pau D'Arco	1	
<i>Tanacetum parthenium</i> Feverfew	1	
<i>Taraxacum officinale</i> Dandelion	1	1312.0
<i>Teucrium polium</i> Golden Germander	1	
<i>Thymus vulgaris</i> Garden Thyme; Thyme; Common Thyme	1	1840.0
<i>Tragopogon porrifolius</i> Salsify	1	112.0
<i>Trifolium pratense</i> Red Clover; Cowgrass; Purple Clover; Peavine Clover	1	274.0
<i>Trigonella foenum-graecum</i> Bockshornklee (Ger.); Alholva (Sp.); Greek Clover; Greek Hay; Fenugreek	1	700.0
<i>Turnera diffusa</i> Damiana	1	1210.0
<i>Ulmus rubra</i> Red Elm; Slippery Elm	1	44.0
<i>Urtica dioica</i> European Nettle; Stinging Nettle	1	483.0
<i>Vaccinium vitis-idaea</i> Lingen; Lingonberry; Cowberry	1	106.0
<i>Vaccinium myrtillus</i> Bilberry; Dwarf Bilberry; Whortleberry	1	356.0
<i>Vaccinium macrocarpon</i> Cranberry; American Cranberry; Large Cranberry	1	30.0
<i>Vaccinium corymbosum</i> Blueberry	1	
<i>Valeriana officinalis</i> Garden-Heliotrope; Common Valerian; Valerian	1	844.0
<i>Verbascum thapsus</i> Flannelleaf; Great Mullein; Velvetplant; Flannelplant; Mullein	1	2180.0
<i>Viburnum opulus</i> Snowballbush; European Cranberry Bush; Guelder Rose; Crampbark	1	1404.0
<i>Vigna unguiculata</i> Pea Bean; Asparagus Bean; Yardlong Bean	1	1680.0

Plant	# Chemicals	Total PPM
<i>Viscum album</i> European Mistletoe	1	566.0
<i>Vitis vinifera</i> European Grape; Grapevine; Vigne Vinifere (Fr.); Grape; Wine Grape; Weinrebe (Ger.); Parra (Sp.); Vid (Sp.)	1	2368.0
<i>Xanthosoma sagittifolium</i> Malanga; Yautia; Tannia	1	33.2
<i>Yucca baccata</i> Banana Yucca; Blue Yucca; Spanish Bayonet; Yucca	1	102.0
<i>Zea mays</i> Corn	1	976.0
<i>Zingiber officinale</i> Ginger	1	1326.0