

A Polyamine-Synthesis-Inhibitor

*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
<i>Achillea millefolium</i> Yarrow; Milfoil	2	17.6
<i>Acinos suaveolens</i>	1	
<i>Actaea racemosa</i> Black Cohosh; Black Snakeroot	1	
<i>Agathosma betulina</i> Buchu; Mountain Buchu; Honey Buchu	1	140.0
<i>Agrimonia eupatoria</i> Agrimony; Sticklewort	1	
<i>Allium sativum</i> var. <i>sativum</i> Garlic	2	17.6
<i>Allium cepa</i> Shallot; Onion	1	0.006
<i>Aloe vera</i> Aloe; Bitter Aloes	1	25.3
<i>Aloe</i> spp. Aloe	1	
<i>Aloysia citrodora</i> Lemon Verbena	1	
<i>Althaea officinalis</i> Marshmallow; White Mallow	1	36.3
<i>Amorphophallus konjac</i> Elephant Yam; Konjac; Snake Palm; Devil's Tongue; Leopard Palm; Umbrella Arum	1	
<i>Anacardium occidentale</i> Cashew	1	0.4
<i>Anethum graveolens</i> Dill; Garden Dill	2	0.024
<i>Angelica sinensis</i> Chinese Angelica; Dang Qui; Dong Quai; Dong Gui; Dang Quai; Dang Gui	1	3.9
<i>Anisochilus carnosus</i> Panjiri-ka Pat	1	
<i>Apium graveolens</i> Celery	2	
<i>Arachis hypogaea</i> Peanut; Groundnut	1	0.04
<i>Araucaria bidwillii</i> Monkey puzzle	1	
<i>Arctium lappa</i> Burdock; Gobo; Great Burdock	1	15.4
<i>Arctostaphylos uva-ursi</i> Uva Ursi; Bearberry	1	17.6
<i>Armoracia rusticana</i> Horseradish	1	
<i>Artemisia dracunculus</i> Tarragon	1	
<i>Artemisia annua</i> Sweet Annie; Annual Wormwood (GRIN); Sweet Wormwood (GRIN); Qinghao; Annual Mugwort (GRIN)	1	
<i>Asparagus officinalis</i> Asparagus	1	0.156
<i>Astragalus membranaceus</i> Huang Qi; Huang-Chi	1	
<i>Avena sativa</i> Oats	1	14.3
<i>Ballota nigra</i> Black Horehound	1	
<i>Barosma betulina</i> Buchu	1	
<i>Berberis vulgaris</i> Barberry	1	37.4
<i>Bertholletia excelsa</i> Brazilnut-Tree; Creamnut; Paranut; Brazilnut	1	994.0
<i>Beta vulgaris</i> Beet; Garden Beet; Sugar Beet; Beetroot	1	
<i>Brassica rapa</i> Turnip; Seven-Top Turnip; Rapini	1	
<i>Brassica pekinensis</i> Chinese Cabbage	1	0.004
<i>Brassica oleracea</i> var. <i>italica</i> Cape Broccoli; Winter Broccoli; Asparagus Broccoli; Calabrese; Purple Cauliflower; Heading Broccoli; Broccoli; Sprouting Broccoli	1	
<i>Brassica oleracea</i> var. <i>gemmifera</i> Brussels-Sprouts; Brussel-Sprout	1	0.07200000000000001
<i>Brassica oleracea</i> var. <i>capitata</i> l. Red Cabbage; Cabbage; White Cabbage	1	0.5
<i>Brassica oleracea</i> var. <i>botrytis</i> l. Cauliflower	1	0.078
<i>Brassica napus</i> var. <i>napobrassica</i> Swedish Turnip; Rutabaga; Swede	1	0.096

Plant	# Chemicals	Total PPM
<i>Bupleurum chinense</i> Chai-Hu	1	
<i>Camellia sinensis</i> Tea	1	
<i>Capsicum annuum</i> Bell Pepper; Cone Pepper; Green Pepper; Cherry Pepper; Paprika; Sweet Pepper	1	0.004
<i>Carica papaya</i> Papaya	1	
<i>Carthamus tinctorius</i> Safflower	1	22.0
<i>Carya ovata</i> Shagbark Hickory	1	0.04
<i>Carya illinoensis</i> Pecan	1	0.04
<i>Caulophyllum thalictroides</i> Blue Cohosh	1	38.5
<i>Centaurea cyanus</i> Cornflower; Bachelor's Button	1	
<i>Centaurea calcitrapa</i> Star-Thistle	1	
<i>Centella asiatica</i> Gotu Kola; Pennywort	1	13.2
<i>Chamaemelum nobile</i> Garden Camomile; Roman Camomile; Perennial Camomile	2	
<i>Chondrus crispus</i> Irish Moss	1	36.0
<i>Chrysanthemum parthenium</i> Feverfew	1	
<i>Cichorium intybus</i> Succory; Witloof; Chicory	1	
<i>Cichorium endivia</i> Escarole; Endive	1	0.048
<i>Cimicifuga racemosa</i> Black Snakeroot; Black Cohosh	1	35.2
<i>Citrus sinensis</i> Orange	1	0.004
<i>Citrus reticulata</i> Tangerine; Mandarin	1	
<i>Citrus paradisi</i> Grapefruit	1	0.054
<i>Cnicus benedictus</i> Blessed Thistle	1	37.4
<i>Cocos nucifera</i> Nariyal; Coconut Palm; Kokospalme (Ger.); Cocotero (Sp.); Coconut; Copra	1	0.04
<i>Colchicum autumnale</i> Autumn Crocus; Meadow Saffron	1	
<i>Conyza canadensis</i> Butterweed; Horseweed; Hogweed	1	
<i>Coriandrum sativum</i> Coriander; Cilantro; Chinese Parsley	1	
<i>Corylus avellana</i> English Filbert; Cobnut; European Filbert; Hazel; European Hazel	1	0.16
<i>Crataegus rhipidophylla</i> Hawthorn	2	
<i>Crataegus monogyna</i> English Hawthorn; Hawthorn	1	
<i>Crataegus laevigata</i> English Hawthorn; Woodland Hawthorn; Hawthorn; Whitethorn	2	22.0
<i>Cucumis sativus</i> Cucumber	1	5.6
<i>Cucumis melo</i> Persian Melon; Nutmeg Melon; Melon; Muskmelon; Netted Melon; Cantaloupe	1	0.008
<i>Cucurbita pepo</i> Pumpkin	1	32.4
<i>Curcuma longa</i> Turmeric; Indian Saffron	1	
<i>Cymbopogon citratus</i> West Indian Lemongrass; Lemongrass	1	124.0
<i>Cynara cardunculus</i> Artichoke	1	
<i>Cypripedium pubescens</i> Ladyslipper	1	98.0
<i>Daphne genkwa</i> Yuan Hua	1	
<i>Daucus carota</i> Carrot	2	0.04
<i>Digitalis purpurea</i> Purple Foxglove	1	
<i>Dioscorea villosa</i> Wild Yam	1	
<i>Dioscorea</i> sp. Wild Yam	1	
<i>Echinacea</i> spp Echinacea; Coneflower	2	21.5

Plant	# Chemicals	Total PPM
<i>Echinacea purpurea</i> Echinacea; Eastern Purple-Coneflower; Purple-Coneflower	1	
<i>Echinacea angustifolia</i> Echinacea; Narrow Leaf Purple-Coneflower; Narrow Leaf Echinacea	1	
<i>Eleutherococcus senticosus</i> Spiny Ginseng; Wu jia; Ci wu jia (Pinyin); Eleuthero Ginseng; Siberian Ginseng	1	
<i>Elytrigia repens</i> Couchgrass; Quackgrass; Twitchgrass; Wheatgrass; Doggrass	1	204.0
<i>Ephedra sinica</i> Chinese Ephedra; Ma Huang	2	13.2
<i>Equisetum arvense</i> Field Horsetail; Horsetail	2	14.3
<i>Eriodictyon californicum</i> Mountain Balm; Holy Herb; California Yerba Santa; Gum Bush; Hierba Santa; Bear's Weed; Tarweed; Yerba Santa; Consumptive's Weed	1	
<i>Eucalyptus globulus</i> Blue Gum; Eucalypt; Tasmanian Bluegum	1	
<i>Eupatorium perfoliatum</i> Boneset	1	
<i>Euphrasia officinalis</i> Eyebright	2	5.2
<i>Fagopyrum esculentum</i> Buckwheat	1	0.4
<i>Foeniculum vulgare</i> Fennel	1	
<i>Fragaria spp</i> Strawberry	1	0.004
<i>Frangula purshiana</i> Cascara Sagrada; Cascara Buckthorn	1	12.1
<i>Fucus vesiculosus</i> Kelp; Bladderwrack	1	18.7
<i>Gentiana lutea</i> Yellow Gentian; Gentian	1	19.8
<i>Ginkgo biloba</i> Maidenhair Tree; Ginkgo	2	
<i>Glechoma hederacea</i> Alehoof	1	
<i>Glycine max</i> Soybean	1	3.85
<i>Glycyrrhiza glabra</i> Licorice-Root; Common Licorice; Smooth Licorice; Licorice	2	1.1
<i>Gymnema sylvestre</i> Gymnema; Miracle Fruit	1	
<i>Harpagophytum procumbens</i> Grapple Plant; Devil's Claw	1	16.5
<i>Hibiscus sabdariffa</i> Roselle; Indian Sorrel; Rosa de Jamaica (Sp.); Rosella (Ger.); Acedera de Guinea (Sp.); Sereni (Sp.); Malventee (Ger.); Jamaica Sorrel; Kharkadi; Sorrel; Red Sorrel	1	157.3
<i>Hordeum vulgare</i> Barley; Barleygrass	1	48.0
<i>Humulus lupulus</i> Hops	1	18.7
<i>Hydnocarpus wightiana</i> Hindi Chaulmoogra	1	
<i>Hydrangea arborescens</i> Hydrangea; Smooth Hydrangea	1	17.6
<i>Hydrastis canadensis</i> Goldenseal	1	11.0
<i>Inula helenium</i> Elecampane	1	
<i>Jatropha gossypifolia</i> Spanish Physic Nut	1	
<i>Juglans nigra</i> Black Walnut	1	0.04
<i>Juglans cinerea</i> Butternut	1	0.2
<i>Juniperus virginiana</i> Red Cedar	1	0.08
<i>Juniperus communis</i> Common Juniper; Juniper	2	2.6
<i>Lactuca sativa</i> Lettuce	1	0.116
<i>Larrea tridentata</i> Chaparral; Creosote Bush	1	20.9
<i>Linum usitatissimum</i> Linseed; Flax	1	
<i>Liquidambar styraciflua</i> American Styrax; Sweetgum	1	0.8
<i>Lobelia inflata</i> Lobelia; Indian Tobacco	1	5.5
<i>Lycopersicon esculentum</i> Tomato	1	0.068
<i>Lycopodium clavatum</i> Antler Herb; Clubmoss	1	

Plant	# Chemicals	Total PPM
<i>Maclura pomifera</i> Hedge Apple; Osage-Orange	1	
<i>Malus domestica</i> Apple	2	
<i>Marrubium vulgare</i> White Horehound; Horehound	1	
<i>Matricaria recutita</i> Wild Camomile; Annual Camomile; German Camomile	1	
<i>Medicago sativa</i> Alfalfa; Lucerne	2	0.0819999999999999
<i>Mentha x rotundifolia</i> Applemint	1	
<i>Mentha x piperita</i> Peppermint	1	12.1
<i>Mentha spicata</i> Spearmint; Hortela da Folha Miuda	1	
<i>Mentha pulegium</i> European Pennyroyal	1	50.0
<i>Mentha aquatica</i> Water Mint	1	
<i>Musa x paradisiaca</i> Banana; Plantain	1	0.08
<i>Myrica cerifera</i> Wax Myrtle; Candle-Berry; Bayberry; Southern Bayberry	1	37.4
<i>Nepeta cataria</i> Catnip	1	135.3
<i>Ocimum tenuiflorum</i> Anise-Scented Basil	1	
<i>Ocimum basilicum</i> Sweet Basil; Cuban Basil; Basil	1	
<i>Olea europaea</i> Olive	1	
<i>Ononis spinosa</i> Hauhechel (Ger.); Spiny Restharrow; Restharrow	1	
<i>Origanum vulgare</i> Oregano; Wild Marjoram; Common Turkish Oregano; European Oregano; Wild Oregano; Pot Marjoram	1	
<i>Panax ginseng</i> Chinese Ginseng; Ginseng; Oriental Ginseng; Korean Ginseng	1	27.5
<i>Parthenium integrifolium</i> Wild Quinine; Feverfew; Missouri Snakeroot; American Feverfew; Prairie-Dock	1	
<i>Passiflora incarnata</i> Manzana de Mayo; Mayapple; Passionflower	2	
<i>Perilla frutescens</i> Perilla	1	
<i>Petroselinum crispum</i> Parsley	2	0.042
<i>Phaseolus vulgaris</i> French Bean; Snap Bean; Navy Bean; Kidney Bean; Dwarf Bean; Garden Bean; String Bean; Pop Bean; Haricot; Wax Bean; Field Bean; Flageolet Bean; Black Bean; Popping Bean; Haricot Vert; Green Bean; Haricot Bean	2	0.036000000000000004
<i>Phoenix dactylifera</i> Date Palm	1	
<i>Phyllanthus emblica</i> Emblic; Myrobalan	1	24.0
<i>Pimenta dioica</i> Jamaica-Pepper; Pimento; Pimenta; Allspice; Clover-Pepper	1	0.08
<i>Pimpinella anisum</i> Anise; Sweet Cumin	1	
<i>Pinus echinata</i> Shortleaf Pine	1	0.4
<i>Pistacia vera</i> Pistachio	1	0.2
<i>Pisum sativum</i> Pea	1	0.004
<i>Plantago psyllium</i> Psyllium	1	15.4
<i>Plantago major</i> Common Plantain	2	
<i>Pogostemon cablin</i> Patchouli	1	
<i>Polygonum multiflorum</i> Fo Ti; Chinese Cornbind; Chinese Knotweed; Fleeceflower; He Shou Wu	1	148.0
<i>Prosopis juliflora</i> Mesquite	1	
<i>Prunus persica</i> Peach	1	0.006
<i>Prunus dulcis</i> Almond	1	6.06
<i>Prunus domestica</i> Plum	1	0.026
<i>Prunus cerasus</i> Sour Cherry	1	

Plant	# Chemicals	Total PPM
<i>Pueraria montana</i> Kudzu; Kudzu	1	
<i>Punica granatum</i> Grenadier (Fr.); Granado (Sp.); Pomegranate; Granatapfelstrauch (Ger.); Mangrano (Sp.); Zakuro (Jap.); Granatapfelbaum (Ger.); Romanzeiro (Port.)	1	
<i>Pyrus communis</i> Pear	1	0.002
<i>Quercus stellata</i> Post Oak	1	0.08
<i>Quercus rubra</i> Northern Red Oak	1	0.04
<i>Quercus phellos</i> Willow Oak	1	0.6
<i>Quercus alba</i> White Oak	1	16.58
<i>Raphanus sativus</i> Radish	1	
<i>Rheum rhabarbarum</i> Rhubarb	1	
<i>Rhodymenia palmata</i> Dulse	1	
<i>Rhus glabra</i> Smooth Sumac	1	0.5
<i>Ribes uva-crispa</i> Gooseberry	1	
<i>Ribes rubrum</i> White Currant; Red Currant	1	
<i>Ribes nigrum</i> Black Currant	1	
<i>Rosa canina</i> Dog Rose; Dogbrier; Rose	1	2.105
<i>Rosmarinus officinalis</i> Rosemary	1	
<i>Rubus idaeus</i> Red Raspberry; Raspberry	1	27.5
<i>Rubus chamaemorus</i> Cloudberry	1	
<i>Rumex crispus</i> Lengua De Vaca; Yellow Dock; Sour Dock; Curly Dock	1	27.5
<i>Ruscus aculeatus</i> Box-Holly; Butcher's Broom	1	25.4
<i>Salix alba</i> White Willow	2	12.1
<i>Salvia officinalis</i> Sage	2	
<i>Satureja montana</i> Winter Savory; Savory	1	
<i>Schisandra chinensis</i> Schizandra; Wu Wei Zi; Chinese Magnolia Vine; Wu Wei Zu; Magnolia Vine; Five-Flavor-Fruit	1	8.1
<i>Scutellaria lateriflora</i> Scullcap; Mad-Dog Skullcap	2	9.100000000000001
<i>Scutellaria galericulata</i> Marsh Skullcap	1	
<i>Scutellaria baicalensis</i> Chinese Skullcap; Huang Qin; Baikal Skullcap	1	
<i>Senna obtusifolia</i> Sicklepod	1	
<i>Senna alexandrina</i> Indian Senna; True Senna; Alexandran senna	1	
<i>Serenoa repens</i> Saw Palmetto; Scrub-Palmetto	2	
<i>Silybum marianum</i> Milk Thistle; Lady's Thistle	2	178.1
<i>Smilax spp</i> Sarsaparilla	1	34.1
<i>Smilax officinalis</i> Sarsaparilla	1	
<i>Solanum tuberosum</i> Potato	1	0.02
<i>Solanum melongena</i> Eggplant; Aubergine	1	0.004
<i>Sorbus aucubaria</i> Rowan Berry	1	0.022
<i>Spinacia oleracea</i> Spinach	1	0.114
<i>Spirulina spp.</i> Spirulina	1	
<i>Stachys officinalis</i> Wood Betony; Purple Betony; Bishop's-Wort; Betony	2	
<i>Stellaria media</i> Common Chickweed; Chickweed	2	4.7
<i>Stevia rebaudiana</i> Stevia; Ca-A-E; Sweet Leaf of Paraguay	1	50.0
<i>Symphoricarpos orbiculatus</i> Buckbush	1	0.16

Plant	# Chemicals	Total PPM
<i>Symphytum officinale</i> Comfrey	1	11.4
<i>Tabebuia heptaphylla</i> Pau D'Arco	1	2.2
<i>Tanacetum vulgare</i> Tansy	1	
<i>Tanacetum parthenium</i> Feverfew	1	
<i>Taraxacum officinale</i> Dandelion	1	9.5
<i>Teucrium polium</i> Golden Germander	1	
<i>Thymus vulgaris</i> Common Thyme; Garden Thyme; Thyme	2	32.0
<i>Thymus serpyllum</i> Creeping Thyme	1	
<i>Trifolium pratense</i> Peavine Clover; Cowgrass; Red Clover; Purple Clover	1	8.584
<i>Trigonella foenum-graecum</i> Bockshornklee (Ger.); Greek Clover; Greek Hay; Fenugreek; Alholva (Sp.)	2	17.6
<i>Triticum aestivum</i> Wheat	1	
<i>Turnera diffusa</i> Damiana	1	7.4
<i>Ulmus rubra</i> Red Elm; Slippery Elm	1	16.5
<i>Urtica dioica</i> Stinging Nettle; European Nettle	1	24.2
<i>Vaccinium vitis-idaea</i> Cowberry; Lingonberry; Lingen	1	0.026
<i>Vaccinium myrtillus</i> Bilberry; Dwarf Bilberry; Whortleberry	1	
<i>Vaccinium macrocarpon</i> American Cranberry; Large Cranberry; Cranberry	1	
<i>Valeriana officinalis</i> Garden-Heliotrope; Common Valerian; Valerian	1	48.4
<i>Verbascum thapsus</i> Flannelleaf; Velvetplant; Great Mullein; Flannelplant; Mullein	1	5.5
<i>Viburnum opulus</i> Snowballbush; European Cranberry Bush; Guelder Rose; Crampbark	1	46.0
<i>Vigna unguiculata</i> Black-eyed Pea; Cowpea; Crowder Pea; Southern Pea	1	0.28
<i>Viscum album</i> European Mistletoe	1	
<i>Vitis vinifera</i> European Grape; Grapevine; Grape; Weinrebe (Ger.); Vid (Sp.); Vigne Vinifere (Fr.); Parra (Sp.); Wine Grape	1	36.024
<i>Yucca baccata</i> Banana Yucca; Blue Yucca; Yucca; Spanish Bayonet	1	9.9
<i>Zea mays</i> Corn	1	12.4
<i>Zingiber officinale</i> Ginger	1	