

A Antioxidant Synergist

*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	
Aconitum napellus Garden Wolfsbane; Friar's Cap; Blue Rocket; Aconite; Queen's Fettle; Garden Monkshood; Bear's-Foot; Turk's Cap; Soldier's Cap; European Aconite; Helmet Flower; Monkshood	2	
Adonis vernalis Spring Adonis	1	
Aegle marmelos Bael fruit; Bael de India	1	
Aesculus hippocastanum Horse Chestnut	1	
Alisma plantago-aquatica Ze-Xie; Mud Plantain; Water Plantain; Tse-Hsieh	1	
Allium schoenoprasum Chives	2	
Allium cepa Shallot; Onion	3	
Alocasia macrorrhiza Giant Taro	2	
Althaea officinalis Marshmallow; White Mallow	1	
Ammi visnaga Visnaga	1	
Anabasis aphylla Anabasis	1	
Ananas comosus Pineapple	2	181400.0
Angelica archangelica Wild Parsnip; Garden Angelica; Angelica	1	
Annona squamosa Sweetsop; Sugar-Apple	3	
Annona muricata Soursop	2	
Apium graveolens Celery	3	
Arachis hypogaea Peanut; Groundnut	1	14000.0
Arctostaphylos uva-ursi Uva Ursi; Bearberry	2	
Arnica montana Mountain Tobacco; Leopard's-Bane	2	
Artemisia cina Levant Wormseed	1	
Avena sativa Oats	3	
Averrhoa carambola Carambola; Star Fruit	3	
Berberis vulgaris Barberry	3	
Bertholletia excelsa Paranut; Creamnut; Brazilnut-Tree; Brazilnut	1	210000.0
Beta vulgaris Garden Beet; Beetroot; Beet; Sugar Beet	2	
Borago officinalis Borage; Beeplant; Beebread; Talewort	2	
Brassica oleracea var. sabellica I. Curly Kale; Kale; Scotch Kale; Kitchen Kale	2	
Brassica oleracea var. italica Winter Broccoli; Heading Broccoli; Calabrese; Broccoli; Purple Cauliflower; Cape Broccoli; Sprouting Broccoli; Asparagus Broccoli	2	
Brassica oleracea var. gemmifera Brussel-Sprout; Brussels-Sprouts	2	
Brassica oleracea var. capitata I. Red Cabbage; White Cabbage; Cabbage	2	
Brassica oleracea var. botrytis I. Cauliflower	2	
Brassica oleracea Kohlrabi	2	
Calendula officinalis Calendula; Pot-Marigold	1	12800.0
Camellia sinensis Tea	1	
Capparis spinosa Caper; Caperbush	2	
Capsella bursa-pastoris Shepherd's Purse	3	
Capsicum frutescens Red Chili; Spur Pepper; Chili; Hot Pepper; Tabasco; Cayenne	1	

Plant	# Chemicals	Total PPM
<i>Capsicum annuum</i> Sweet Pepper; Green Pepper; Cherry Pepper; Cone Pepper; Bell Pepper; Paprika	1	
<i>Carica papaya</i> Papaya	3	8800.0
<i>Carya ovata</i> Shagbark Hickory	1	10000.0
<i>Catalpa ovata</i> Kiskasage; Hsin-Pa-Pi	1	
<i>Cephaelis ipecacuanha</i> Ipecac; Raicilla	2	
<i>Chaenomeles lagenaria</i> Chinese Quince; Mu-Kua	3	
<i>Chelidonium majus</i> Celandine	2	
<i>Chenopodium ambrosioides</i> Wormseed; Epazote	2	
<i>Cichorium intybus</i> Witloof; Succory; Chicory	3	
<i>Citrus sinensis</i> Orange	2	23600.0
<i>Citrus reticulata</i> Tangerine; Mandarin	2	28600.0
<i>Citrus paradisi</i> Grapefruit	2	43200.0
<i>Citrus mitis</i> Calamondin; Calamansi	2	
<i>Citrus limon</i> Lemon	1	119000.0
<i>Citrus aurantium</i> Bitter Orange; Petitgrain	2	
<i>Citrus aurantiifolia</i> Lime	2	5600.0
<i>Cocos nucifera</i> Cocotero (Sp.); Copra; Nariyal; Kokospalme (Ger.); Coconut; Coconut Palm	2	
<i>Coffea arabica</i> Coffee	1	
<i>Convallaria majalis</i> Lily-Of-The-Valley	2	
<i>Cornus officinalis</i> Chinese Dogwood	2	
<i>Crataegus rhipidophylla</i> Hawthorn	2	
<i>Crataegus laevigata</i> Whitethorn; English Hawthorn; Hawthorn; Woodland Hawthorn	2	
<i>Cryptostegia grandifolia</i> Rubber Vine	2	
<i>Cucumis melo</i> Melon; Muskmelon; Persian Melon; Nutmeg Melon; Cantaloupe; Netted Melon	1	
<i>Cucurbita pepo</i> Pumpkin	1	8000.0
<i>Cydonia oblonga</i> Quince	2	
<i>Daphne mezereum</i> Spurge Laurel; Spurge Olive	1	
<i>Datura stramonium</i> Jimsonweed	3	5740.0
<i>Daucus carota</i> Carrot	4	
<i>Digitalis purpurea</i> Purple Foxglove	2	
<i>Elytrigia repens</i> Twitchgrass; Doggrass; Couchgrass; Quackgrass; Wheatgrass	1	
<i>Equisetum arvense</i> Field Horsetail; Horsetail	2	
<i>Eriobotrya japonica</i> Loquat	2	
<i>Euonymus atropurpureus</i> Burning Bush; Wahoo	3	
<i>Euphorbia tirucalli</i> Aveloz	2	148000.0
<i>Fagopyrum esculentum</i> Buckwheat	2	46600.0
<i>Ficus carica</i> Figuiet Commun (Fr.); Higo (Sp.); Echte Feige (Ger.); Fico (Ital.); Feigenbaum (Ger.); Figueira (Port.); Higuera Comun (Sp.); Fig	3	116000.0
<i>Filipendula ulmaria</i> Meadowsweet; Queen Of The Meadow	1	
<i>Foeniculum vulgare</i> Fennel	3	
<i>Fragaria spp</i> Strawberry	3	33240.0
<i>Frangula purshiana</i> Cascara Sagrada; Cascara Buckthorn	1	
<i>Galium odoratum</i> Woodruff; Waldmeister	2	

Plant	# Chemicals	Total PPM
<i>Garcinia mangostana</i> Mangosteen; Mangostin	1	
<i>Garcinia cambogia</i> Malabar Tamarind; Brindleberry; Garcinia	1	
<i>Genipa americana</i> Jagua; Genipap	1	12600.0
<i>Ginkgo biloba</i> Maidenhair Tree; Ginkgo	3	
<i>Glycine max</i> Soybean	3	78000.0
<i>Glycyrrhiza glabra</i> Smooth Licorice; Licorice-Root; Commom Licorice; Licorice	1	
<i>Gossypium sp</i> Cotton	1	
<i>Hedera helix</i> Ivy	1	
<i>Helianthus annuus</i> Girasol; Sunflower	5	12200.0
<i>Hibiscus sabdariffa</i> Kharkadi; Roselle; Indian Sorrel; Malventee (Ger.); Sereni (Sp.); Jamaica Sorrel; Acedera de Guinea (Sp.); <i>Rosella</i> (Ger.); Red Sorrel; Sorrel; Rosa de Jamaica (Sp.)	3	498667.0
<i>Hippophae rhamnoides</i> Sallow Thorn; Yellow Spine; Sea Buckthorn	2	
<i>Juglans regia</i> English Walnut	3	
<i>Juniperus communis</i> Juniper; Common Juniper	1	
<i>Kalanchoe pinnata</i> Siempre Viva; Air Plant	3	
<i>Kalanchoe daegrimontiana</i> Devil's-Backbone	1	
<i>Lactuca virosa</i> Bitter Lettuce	2	
<i>Lactuca scariola</i> Prickly Lettuce	2	
<i>Lactuca sativa</i> Lettuce	2	2200.0
<i>Ledum palustre</i> Marsh Tea; Wild Rosemary	3	
<i>Leonurus cardiaca</i> Motherwort	2	
<i>Lepidium meyenii</i> Maca; Peruvian Ginseng	1	
<i>Linum usitatissimum</i> Flax; Linseed	2	17600.0
<i>Lupinus albus</i> White Lupine	3	
<i>Lycopersicon esculentum</i> Tomato	4	
<i>Malus domestica</i> Apple	3	
<i>Mammea americana</i> Mamey	1	
<i>Mangifera indica</i> Mango	2	73200.0
<i>Matricaria recutita</i> Wild Camomile; Annual Camomile; German Camomile	1	
<i>Medicago sativa</i> Alfalfa; Lucerne	2	
<i>Morus alba</i> Sang-Pai-Pi; White Mulberry	3	
<i>Mucuna pruriens</i> Cowage; Velvetbean	1	200000.0
<i>Musa x paradisiaca</i> Banana; Plantain	3	7460.0
<i>Myrciaria dubia</i> Guapuro Blanco (Bol.); Araza de Agua (Sp.); Rumberry (Eng.); Camo Camo (Peru); Camu-camu Negro (Peru); Camu-camu (Eng.,Peru,Scn.,Sp.)	2	
<i>Myrtus communis</i> Myrtle; Mirto (Sp.); Myrte (Ger.); Arrayan (Sp.)	2	
<i>Nicotiana tabacum</i> Tobacco	3	
<i>Opuntia ficus-indica</i> Nopal; Indian Fig; Prickly Pear; Nopalito	3	12520.0
<i>Oryza sativa</i> Rice	1	
<i>Panax quinquefolius</i> Ginseng; American Ginseng	3	6000.0
<i>Panax ginseng</i> Korean Ginseng; Ginseng; Oriental Ginseng; Chinese Ginseng	3	
<i>Papaver somniferum</i> Poppyseed Poppy; Opium Poppy	5	96000.0
<i>Paris quadrifolia</i> Herb Paris	1	

Plant	# Chemicals	Total PPM
<i>Parthenocissus quinquefolia</i> Woodbine; Amerika-zuta (Jap.); American-ivy; Virginia-creeper; Five-leaf-ivy	1	
<i>Passiflora edulis</i> Passionfruit; Maracuya	2	
<i>Persea americana</i> Avocado	2	400.0
<i>Petroselinum crispum</i> Parsley	3	
<i>Physalis peruviana</i> Cape Gooseberry; Ground Cherry	3	44000.0
<i>Physalis ixocarpa</i> Tomatillo	2	26380.0
<i>Pimenta dioica</i> Pimento; Clover-Pepper; Allspice; Jamaica-Pepper; Pimenta	1	
<i>Piscidia piscipula</i> Jamaica Dogwood	2	
<i>Pisum sativum</i> Pea	3	
<i>Plantago major</i> Common Plantain	1	
<i>Polygonum multiflorum</i> Chinese Cornbind; Fleecflower; He Shou Wu; Chinese Knotweed; Fo Ti	1	
<i>Polygonum hydropiperoides</i> Mild Water Pepper	2	
<i>Polygonum hydropiper</i> Common Smartweed	1	
<i>Polypodium vulgare</i> Sweet Fern; Common Polypody	2	
<i>Populus nigra</i> Black Poplar	1	
<i>Portulaca oleracea</i> Verdolaga; Purslane	2	20400.0
<i>Prunus persica</i> Peach	1	
<i>Prunus domestica</i> Plum	4	33000.0
<i>Prunus cerasus</i> Sour Cherry	4	
<i>Prunus armeniaca</i> Apricot	3	44000.0
<i>Psidium guajava</i> Guava	2	
<i>Punica granatum</i> Pomegranate; Grenadier (Fr.); Zakuro (Jap.); Romanzeiro (Port.); Mangrano (Sp.); Granatapfelbaum (Ger.); Granatapfelstrauch (Ger.); Granado (Sp.)	3	24600.0
<i>Pyrus communis</i> Pear	2	
<i>Quassia amara</i> Bitterwood; Quassia	1	
<i>Quisqualis indica</i> Rangoon Creeper	3	
<i>Rheum rhabarbarum</i> Rhubarb	3	
<i>Rhododendron ferrugineum</i> Rusty-Leaved Alpenrose	1	
<i>Rhus glabra</i> Smooth Sumac	1	
<i>Ribes uva-crispa</i> Gooseberry	3	32200.0
<i>Ribes rubrum</i> Red Currant; White Currant	3	45600.0
<i>Ribes nigrum</i> Black Currant	1	70000.0
<i>Ricinus communis</i> Castorbean	1	
<i>Rosa spp</i> Rose Hips	2	
<i>Rosa laevigata</i> Cherokee Rose	2	
<i>Rosa gallica</i> French Rose	2	
<i>Rosa centifolia</i> Cabbage Rose	2	
<i>Rosa canina</i> Rose; Dogbrier; Dog Rose	3	154400.0
<i>Rubus idaeus</i> Red Raspberry; Raspberry	3	
<i>Rubus fruticosus</i> Blackberry	2	
<i>Rubus chingii</i> Chinese Raspberry	3	
<i>Rumex acetosella</i> Sheep Sorrel	1	

Plant	# Chemicals	Total PPM
<i>Rumex acetosa</i> Garden Sorrel	1	
<i>Ruta graveolens</i> Rue	1	
<i>Salvia officinalis</i> Sage	1	
<i>Sambucus nigra</i> European Elder; Elder; European Alder; European Elderberry; Black Elder	3	38000.0
<i>Sanguinaria canadensis</i> Bloodroot	1	
<i>Sarcostemma acidum</i> Soma	1	
<i>Schisandra chinensis</i> Wu Wei Zu; Chinese Magnolia Vine; Wu Wei Zi; Magnolia Vine; Five-Flavor-Fruit; Schizandra	3	
<i>Sclerocarya caffra</i> Marula	2	
<i>Sesamum indicum</i> Sesame; Benneseed; Ajonjoli (Sp.); Sesamo (Sp.); Beni	1	790.0
<i>Solanum tuberosum</i> Potato	4	6240.0
<i>Solanum sessiliflorum</i> Cocona	1	
<i>Solanum nigrum</i> Black Nightshade	1	100000.0
<i>Sophora pachycarpa</i> Siberian Pachycarpa	4	
<i>Sorbus aucubaria</i> Rowan Berry	4	78000.0
<i>Spinacia oleracea</i> Spinach	3	
<i>Spondias mombin</i> Yellow Mombin; Yellow Plum	1	30000.0
<i>Stevia rebaudiana</i> Stevia; Ca-A-E; Sweet Leaf of Paraguay	4	
<i>Tamarindus indica</i> Kilytree; Indian Tamarind; Tamarind	4	970000.0
<i>Taraxacum officinale</i> Dandelion	2	59400.0
<i>Theobroma cacao</i> Cacao	4	15000.0
<i>Trigonella foenum-graecum</i> Greek Hay; Alholva (Sp.); Greek Clover; Bockshornklee (Ger.); Fenugreek	1	
<i>Triticum aestivum</i> Wheat	1	
<i>Tussilago farfara</i> Coltsfoot	2	
<i>Urtica dioica</i> European Nettle; Stinging Nettle	4	
<i>Vaccinium vitis-idaea</i> Cowberry; Lingonberry; Lingen	2	
<i>Vaccinium myrtillus</i> Whortleberry; Dwarf Bilberry; Bilberry	2	
<i>Vaccinium macrocarpon</i> Cranberry; American Cranberry; Large Cranberry	2	
<i>Valeriana officinalis</i> Valerian; Garden-Heliotrope; Common Valerian	1	
<i>Valeriana jatamansi</i> Indian Valerian	1	
<i>Vanilla planifolia</i> Bourbon Vanilla; Vanilla	2	
<i>Viburnum prunifolium</i> Black Haw	2	
<i>Viburnum opulus</i> Snowballbush; European Cranberry Bush; Crampbark; Guelder Rose	2	
<i>Vicia faba</i> Faba Bean; Broadbean; Habas	2	
<i>Vigna mungo</i> Black Gram	1	32000.0
<i>Viola odorata</i> Sweet Violet; Common Violet	1	
<i>Vitis vinifera</i> Grape; Wine Grape; Grapevine; Parra (Sp.); Weinrebe (Ger.); European Grape; Vid (Sp.); Vigne Vinifere (Fr.)	5	4040.0
<i>Zea mays</i> Corn	3	
<i>Zingiber officinale</i> Ginger	1	
<i>Zizyphus jujuba</i> Jujube; Ta-Tsao; Da-Zao	1	24000.0