

A Antimelanogenic

*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	2	
Acacia decurrens Green Wattle	1	
Achillea millefolium Yarrow; Milfoil	3	
Aconitum napellus Monkshood; Garden Wolfsbane; Turk's Cap; Blue Rocket; Garden Monkshood; Bear's-Foot; Friar's Cap; Aconite; Soldier's Cap; Queen's Fettle; European Aconite; Helmet Flower	2	
Actaea dahurica Sheng ma; Xing an sheng ma	1	
Actaea cimicifuga Sheng ma; Foetid Bugbane; Bugbane	1	
Adonis vernalis Spring Adonis	2	
Agrimonia eupatoria Agrimony; Sticklewort	3	
Albizia lebeck Women's-Tongue Tree; Frywood; Lebbek Tree; Siris Tree; Koko; Lebbek; East Indian Walnut	1	
Allium schoenoprasum Chives	1	
Allium sativum var. sativum Garlic	2	40.0
Allium cepa Onion; Shallot	2	35080.0
Allium ampeloprasum Kurrat; Elephant Garlic	2	
Althaea officinalis Marshmallow; White Mallow	3	
Ananas comosus Pineapple	1	
Anemarrhena asphodeloides Chih-Mu; Zhi-Mu	1	
Anethum graveolens Dill; Garden Dill	2	
Angelica archangelica Wild Parsnip; Angelica; Garden Angelica	2	
Annona muricata Soursop	1	
Apium graveolens Celery	3	
Arachis hypogaea Peanut; Groundnut	3	54.0
Arbutus unedo Arbutus; Strawberry Tree	1	54000.0
Arctium lappa Gobo; Burdock; Great Burdock	2	5000.0
Arctostaphylos uva-ursi Uva Ursi; Bearberry	3	306000.0
Armoracia rusticana Horseradish	1	
Arnica montana Leopard's-Bane; Mountain Tobacco	2	
Artemisia dracunculus Tarragon	3	20.0
Artemisia capillaris Capillary Wormwood	1	
Artemisia absinthium Wormwood	2	
Artemisia abrotanum Southernwood	2	
Asimina triloba Pawpaw	1	
Aspalathus linearis Red Bush Tea; Rooibos; Kaffree Tea	2	
Astragalus membranaceus Huang Qi; Huang-Chi	2	
Avena sativa Oats	1	
Ballota nigra Black Horehound	2	
Berberis vulgaris Barberry	2	
Beta vulgaris Beetroot; Beet; Garden Beet; Sugar Beet	2	
Boehmeria nivea Ramie	1	

Plant	# Chemicals	Total PPM
<i>Brassica pekinensis</i> Chinese Cabbage	1	22.0
<i>Brassica oleracea</i> var. <i>italica</i> Broccoli; Heading Broccoli; Winter Broccoli; Cape Broccoli; Purple Cauliflower; Asparagus Broccoli; Calabrese; Sprouting Broccoli	2	
<i>Brassica oleracea</i> var. <i>gemmifera</i> Brussels-Sprouts; Brussel-Sprout	1	68.0
<i>Brassica oleracea</i> var. <i>capitata</i> I. Cabbage; White Cabbage; Red Cabbage	3	154.0
<i>Brassica oleracea</i> var. <i>botrytis</i> I. Cauliflower	2	16.0
<i>Brassica nigra</i> Black Mustard	3	
<i>Calendula officinalis</i> Calendula; Pot-Marigold	2	
<i>Camellia sinensis</i> Tea	2	
<i>Capsella bursa-pastoris</i> Shepherd's Purse	1	
<i>Capsicum frutescens</i> Spur Pepper; Tabasco; Red Chili; Cayenne; Chili; Hot Pepper	2	64.0
<i>Capsicum annuum</i> Green Pepper; Cone Pepper; Sweet Pepper; Paprika; Bell Pepper; Cherry Pepper	2	22.0
<i>Carica papaya</i> Papaya	1	
<i>Carum carvi</i> Comino (Sp.); Kummel (Ger.); Caraway; Comino de prado (Sp.); Carum	1	
<i>Castanea sativa</i> European Chestnut	1	
<i>Catalpa bignonioides</i> Indian bean	2	
<i>Catharanthus roseus</i> Rosy Periwinkle; Madagascar Periwinkle	1	
<i>Ceiba pentandra</i> Kapok; Silk-Cotton Tree	1	
<i>Centaurea cyanus</i> Bachelor's Button; Cornflower	3	
<i>Centaureum erythraea</i> Centaury	2	
<i>Chamaemelum nobile</i> Roman Camomile; Perennial Camomile; Garden Camomile	1	
<i>Chimaphila umbellata</i> King's Cure; Pipsissewa	1	150000.0
<i>Cichorium intybus</i> Witloof; Chicory; Succory	2	1534.0
<i>Cichorium endivia</i> Escarole; Endive	1	
<i>Cimicifuga dahurica</i> Sheng Ma	1	
<i>Cinchona</i> spp Quinine	1	
<i>Cinchona pubescens</i> Red Peruvian-Bark; Redbark; Red Cinchona; Quinine	3	
<i>Cinnamomum verum</i> Cinnamon; Ceylon Cinnamon	1	
<i>Cinnamomum camphora</i> Camphor; Ho Leaf	1	
<i>Citrullus lanatus</i> Watermelon	1	
<i>Citrullus colocynthis</i> Colocynth	2	
<i>Citrus sinensis</i> Orange	1	100.0
<i>Citrus paradisi</i> Grapefruit	1	102.0
<i>Citrus limon</i> Lemon	1	70.0
<i>Clematis vitalba</i> Traveler's Joy	2	
<i>Cnicus benedictus</i> Blessed Thistle	1	
<i>Coccinia grandis</i> Tindori; Pepasan; Kanduri; Kundree; Tindora; Ivy Gourd; Little Gourd	1	
<i>Coffea arabica</i> Coffee	2	180000.0
<i>Cola acuminata</i> Abata Cola	1	
<i>Coleus barbatus</i> Forskohl's Coleus	1	
<i>Conium maculatum</i> Spotted Hemlock; Poison Hemlock; Spotted Parsley; Hemlock; Carrot Fern; Fool's Parsley	2	
<i>Convallaria majalis</i> Lily-Of-The-Valley	2	
<i>Conyza canadensis</i> Horseweed; Hogweed; Butterweed	1	

Plant	# Chemicals	Total PPM
<i>Corchorus olitorius</i> Nalta Jute; Mulukiya; Jew's Mallow	1	
<i>Coriandrum sativum</i> Chinese Parsley; Coriander; Cilantro	3	2518.0
<i>Corylus americana</i> American Filbert; American Hazel	2	
<i>Crataegus rhipidophylla</i> Hawthorn	2	
<i>Crataegus pentagyna</i> Hawthorn	1	
<i>Crataegus monogyna</i> Hawthorn; English Hawthorn	2	
<i>Crataegus laevigata</i> Woodland Hawthorn; Hawthorn; English Hawthorn; Whitethorn	2	
<i>Crataegus cuneata</i> Hawthorn	1	
<i>Cucumis sativus</i> Cucumber	2	
<i>Cucumis melo</i> Netted Melon; Persian Melon; Nutmeg Melon; Muskmelon; Cantaloupe; Melon	1	
<i>Cucurbita pepo</i> Pumpkin	1	
<i>Curcuma longa</i> Indian Saffron; Turmeric	2	10.0
<i>Cyamopsis tetragonoloba</i> Cluster-Bean; Siam-Bean; Guar	3	
<i>Cydonia oblonga</i> Quince	1	
<i>Cynara cardunculus</i> Artichoke	2	
<i>Datura stramonium</i> Jimsonweed	2	
<i>Daucus carota</i> Carrot	2	
<i>Digitalis purpurea</i> Purple Foxglove	2	
<i>Dipsacus fullonum</i>	2	
<i>Dodonaea viscosa</i> Hopwood	1	
<i>Dryopteris filix-mas</i> Male Fern	1	
<i>Echinacea</i> spp Echinacea; Coneflower	2	
<i>Echinacea pallida</i> Pale Purple-Coneflower; Echinacea; Pale-Flower Echinacea	1	
<i>Echinacea angustifolia</i> Echinacea; Narrow Leaf Echinacea; Narrow Leaf Purple-Coneflower	1	
<i>Elaeagnus angustifolia</i> Silver Berry; Russian Olive	2	
<i>Elettaria cardamomum</i> Cardamom	1	
<i>Eleutherococcus senticosus</i> Ci wu jia (Pinyin); Spiny Ginseng; Siberian Ginseng; Eleuthero Ginseng; Wu jia	3	
<i>Equisetum hyemale</i> Horsetail; Scouring Rush	1	
<i>Equisetum arvense</i> Horsetail; Field Horsetail	3	
<i>Eriobotrya japonica</i> Loquat	1	
<i>Erythroxylum coca</i> Coca	2	
<i>Eucalyptus grandis</i> Flooded Gum; Gum; Rose Gum	1	
<i>Eucalyptus globulus</i> Tasmanian Bluegum; Eucalypt; Blue Gum	3	
<i>Eucommia ulmoides</i> Du Zhong; Tu Chung; Gutta-Percha Tree	2	
<i>Euphorbia pulcherrima</i> Poinsettia	1	
<i>Euphorbia hirta</i> Queensland Asthma Herb	1	
<i>Euphrasia officinalis</i> Eyebright	1	
<i>Fagopyrum esculentum</i> Buckwheat	3	
<i>Fallopia japonica</i> Giant Knotweed; Hu-Zhang; Mexican Bamboo; Japanese Knotweed	1	
<i>Ficus carica</i> Figuiet Commun (Fr.); Fig; Higo (Sp.); Higuera Comun (Sp.); Feigenbaum (Ger.); Fico (Ital.); Figueira (Port.); Echte Feige (Ger.)	1	
<i>Foeniculum vulgare</i> Fennel	3	
<i>Fragaria</i> spp Strawberry	4	68.0

Plant	# Chemicals	Total PPM
<i>Gaultheria procumbens</i> Wintergreen; Checkerberry; Mountain Tea; Creeping Wintergreen; Teaberry; Wintergrun (Ger.)	2	
<i>Gentiana lutea</i> Gentian; Yellow Gentian	2	
<i>Geranium thunbergii</i> Oriental Geranium; Gennoshiouko	1	
<i>Ginkgo biloba</i> Maidenhair Tree; Ginkgo	1	
<i>Glechoma hederacea</i> Alehoof	2	
<i>Glycine max</i> Soybean	3	9.0
<i>Harpagophytum procumbens</i> Devil's Claw; Grapple Plant	2	
<i>Hedera helix</i> Ivy	1	
<i>Helianthus annuus</i> Girasol; Sunflower	2	59608.0
<i>Helichrysum angustifolium</i> Everlasting; Immortelle	1	
<i>Hibiscus sabdariffa</i> Sorrel; Sereni (Sp.); Kharkadi; Rosa de Jamaica (Sp.); Red Sorrel; Jamaica Sorrel; Malventee (Ger.); Roselle; Indian Sorrel; Acedera de Guinea (Sp.); Rosella (Ger.)	1	
<i>Hordeum vulgare</i> Barley; Barleygrass	2	
<i>Houttuynia cordata</i> Yu Xing Cao; Dokudami; Fishwort	1	
<i>Humulus lupulus</i> Hops	2	
<i>Hydrastis canadensis</i> Goldenseal	1	
<i>Hyoscyamus niger</i> Henbane	1	
<i>Hypericum perforatum</i> Klamath Weed; Common St. Johnswort; Goatweed; Hypericum; St. John's-wort	2	
<i>Hyssopus officinalis</i> Hyssop	1	
<i>Ilex paraguariensis</i> Mate; Paraguay Tea; South American Holly	1	
<i>Inonotus obliquus</i>	1	
<i>Ipomoea purga</i> Jalap	1	80000.0
<i>Ipomoea batatas</i> Sweet Potato	2	
<i>Juglans regia</i> English Walnut	2	
<i>Juglans nigra</i> Black Walnut	2	
<i>Juniperus communis</i> Common Juniper; Juniper	3	
<i>Kalanchoe pinnata</i> Siempre Viva; Air Plant	1	
<i>Kalmia latifolia</i> Mountain Laurel; Spoonwood; Calico Bush	1	
<i>Krameria triandra</i> Rhatany	1	
<i>Lactuca sativa</i> Lettuce	1	
<i>Laurus nobilis</i> Sweet Bay; Bay; Grecian Laurel; Bay Laurel; Bayleaf; Laurel	1	
<i>Ledum palustre</i> Marsh Tea; Wild Rosemary	1	
<i>Levisticum officinale</i> Lovage	1	
<i>Ligustrum japonicum</i> Japanese Privet; Ligustri Fructus	1	
<i>Linum usitatissimum</i> Flax; Linseed	1	
<i>Lonicera japonica</i> Japanese Honeysuckle	1	
<i>Lycopersicon esculentum</i> Tomato	2	48.0
<i>Lycopodium clavatum</i> Antler Herb; Clubmoss	1	
<i>Lycopus virginicus</i> Bugle	2	
<i>Lycopus europeus</i> European Bugle	2	
<i>Lythrum salicaria</i> Purple Loosestrife	1	
<i>Magnolia officinalis</i> Hou Pu; Magnolia-Bark; Chinese Magnolia	1	
<i>Magnolia kobus</i> Xin-Yi; Hsin-I	1	

Plant	# Chemicals	Total PPM
<i>Mahonia repens</i> Oregon Barberry; Oregon Grape-Holly; Creeping Barberry; Oregon Grape	1	
<i>Malus domestica</i> Apple	3	2540.0
<i>Maranta arundinacea</i> Arrowroot; Bermuda Arrowroot	2	
<i>Marrubium vulgare</i> White Horehound; Horehound	2	
<i>Matricaria recutita</i> Annual Camomile; German Camomile; Wild Camomile	2	
<i>Medicago sativa</i> Lucerne; Alfalfa	1	
<i>Melia azedarach</i> Chinaberry	1	
<i>Melilotus officinalis</i> Yellow Sweetclover	2	
<i>Melissa officinalis</i> Bee Balm; Balm; Lemonbalm; Melissa	3	
<i>Mentha x rotundifolia</i> Applemint	1	
<i>Mentha x piperita</i> Peppermint	2	
<i>Menyanthes trifoliata</i> Bogbean; Buckbean; Marsh Trefoil; Marsh Clover; Water Trefoil; Bog Myrtle	3	
<i>Moringa oleifera</i> Moringa; Jacinto (Sp.); Ben Nut; Drumstick Tree; Horseradish Tree; Benzolive Tree; West Indian Ben	1	
<i>Morus alba</i> White Mulberry; Sang-Pai-Pi	2	
<i>Myristica fragrans</i> nuez moscada (Sp.); Mace; nogal moscado (Sp.); Nutmeg; Muskatnussbaum (Ger.)	1	
<i>Nicotiana tabacum</i> Tobacco	2	
<i>Ocimum basilicum</i> Basil; Cuban Basil; Sweet Basil	1	38100.0
<i>Oenothera biennis</i> Evening-Primrose	2	
<i>Olea europaea</i> Olive	2	
<i>Ononis spinosa</i> Hauhechel (Ger.); Spiny Restharrow; Restharrow	1	
<i>Origanum vulgare</i> Common Turkish Oregano; Pot Marjoram; European Oregano; Wild Marjoram; Oregano; Wild Oregano	3	14384.0
<i>Origanum majorana</i> Marjoram; Sweet Marjoram	3	
<i>Panax ginseng</i> Chinese Ginseng; Ginseng; Oriental Ginseng; Korean Ginseng	1	
<i>Papaver somniferum</i> Poppyseed Poppy; Opium Poppy	1	
<i>Perilla frutescens</i> Perilla	2	
<i>Persea americana</i> Avocado	2	
<i>Petasites hybridus</i> European Butterbur	1	
<i>Petroselinum crispum</i> Parsley	3	
<i>Peucedanum ostruthium</i> Masterwort	2	
<i>Phaseolus vulgaris</i> Field Bean; Popping Bean; Garden Bean; Pop Bean; Snap Bean; Black Bean; String Bean; Haricot Bean; Kidney Bean; Haricot; Dwarf Bean; Haricot Vert; Navy Bean; Green Bean; Wax Bean; French Bean; Flageolet Bean	1	
<i>Phoenix dactylifera</i> Date Palm	1	
<i>Physalis peruviana</i> Ground Cherry; Cape Gooseberry	1	
<i>Picrorhiza kurrooa</i> Picrorhiza	1	
<i>Pimpinella anisum</i> Anise; Sweet Cumin	2	
<i>Pinus sylvestris</i> Scotch Pine	3	
<i>Piper nigrum</i> Black Pepper; White Pepper; Pepper	1	
<i>Pisum sativum</i> Pea	1	
<i>Plantago major</i> Common Plantain	2	
<i>Pluchea carolinensis</i> Pito sico; Santa maria	1	
<i>Polygonum hydropiperoides</i> Mild Water Pepper	1	
<i>Polypodium vulgare</i> Common Polypody; Sweet Fern	1	
<i>Portulaca oleracea</i> Purslane; Verdolaga	1	

Plant	# Chemicals	Total PPM
<i>Prunus spinosa</i> Blackthorn; Sloe	1	
<i>Prunus serotina</i> Wild Cherry; Black Cherry	1	
<i>Prunus persica</i> Peach	2	
<i>Prunus laurocerasus</i> Cherry Laurel	1	
<i>Prunus dulcis</i> Almond	1	
<i>Prunus domestica</i> Plum	2	
<i>Prunus cerasus</i> Sour Cherry	2	
<i>Prunus armeniaca</i> Apricot	2	
<i>Pteridium aquilinum</i> Bracken Fern; Bracken	2	
<i>Pterocarpus marsupium</i> Malabar Kino; bijasal; Indian Kino	1	
<i>Punica granatum</i> Pomegranate; Granado (Sp.); Romanzeiro (Port.); Granatapfelbaum (Ger.); Mangrano (Sp.); Zakuro (Jap.); Granatapfelstrauch (Ger.); Grenadier (Fr.)	3	
<i>Pyrus communis</i> Pear	2	39400.0
<i>Raphanus sativus</i> Radish	1	182.0
<i>Rheum rhabarbarum</i> Rhubarb	2	16.0
<i>Rheum officinale</i> Chinese Rhubarb	1	
<i>Rhododendron ponticum</i> Pontic Alpenrose	3	
<i>Rhododendron ferrugineum</i> Rusty-Leaved Alpenrose	1	
<i>Rhynchosia minima</i> Burn Mouth Vine	1	
<i>Ribes uva-crispa</i> Gooseberry	1	
<i>Ribes nigrum</i> Black Currant	3	
<i>Ricinus communis</i> Castorbean	1	
<i>Rosa damascena</i> Damask Rose	1	30000.0
<i>Rosa canina</i> Dogbrier; Dog Rose; Rose	2	
<i>Rosmarinus officinalis</i> Rosemary	2	
<i>Rubus spectabilis</i> Salmonberry	1	
<i>Rubus phoenicolasius</i> Wineberry; Wine Raspberry; Japanese Wineberry	1	
<i>Rubus parviflorus</i> Thimbleberry; Salmonberry	1	
<i>Rubus idaeus</i> Raspberry; Red Raspberry	2	
<i>Rubus fruticosus</i> Blackberry	2	
<i>Salvia</i> sp. Chia	1	
<i>Salvia officinalis</i> Sage	2	
<i>Sambucus simpsonii</i> Simpson's elderberry	2	
<i>Sambucus nigra</i> European Elderberry; Black Elder; European Elder; European Alder; Elder	2	
<i>Sanguisorba minor</i> Small Burnet	1	
<i>Santolina chamaecyparissus</i> Lavender Cotton	1	
<i>Satureja montana</i> Savory; Winter Savory	2	
<i>Schinus molle</i> California Peppertree; Mastic-Tree; Peruvian Peppertree	1	
<i>Schisandra chinensis</i> Wu Wei Zu; Five-Flavor-Fruit; Chinese Magnolia Vine; Schizandra; Magnolia Vine; Wu Wei Zi	1	
<i>Scopolia carniolica</i> Scopolia	2	
<i>Senna obtusifolia</i> Sicklepod	2	
<i>Sesamum indicum</i> Benneseed; Beni; Sesame; Sesamo (Sp.); Ajonjoli (Sp.)	3	

Plant	# Chemicals	Total PPM
<i>Solanum tuberosum</i> Potato	3	5701.0
<i>Solanum torvum</i> Wild Eggplant; Susumba	2	
<i>Solanum melongena</i> Aubergine; Eggplant	2	
<i>Solidago virgaurea</i> European Goldenrod; Woundwort	2	
<i>Solidago gigantea</i> Early Goldenrod	2	
<i>Sophora japonica</i> Japanese Pagoda Tree	1	
<i>Sorbus aucubaria</i> Rowan Berry	3	
<i>Spartium junceum</i> Genet; Weaver's Broom; Spanish Broom	1	
<i>Spinacia oleracea</i> Spinach	3	
<i>Stachys officinalis</i> Bishop's-Wort; Purple Betony; Wood Betony; Betony	2	10000.0
<i>Stachytarpheta jamaicensis</i> Brazilian Tea	1	
<i>Stellaria media</i> Chickweed; Common Chickweed	2	
<i>Strychnos nux-vomica</i> Strychnine; Nux-Vomica	1	
<i>Symphytum officinale</i> Comfrey	2	
<i>Tagetes patula</i> French Marigold	1	
<i>Tanacetum vulgare</i> Tansy	2	
<i>Taraxacum officinale</i> Dandelion	3	
<i>Taxus baccata</i> Common Yew	2	
<i>Tecoma stans</i> Yellow Elder	1	
<i>Teucrium scorodonia</i> Wood Germander; Germander	1	
<i>Teucrium scordium</i> Water Germander	1	
<i>Teucrium chamaedrys</i> Wall Germander	2	400.0
<i>Theobroma cacao</i> Cacao	3	
<i>Thymus vulgaris</i> Thyme; Garden Thyme; Common Thyme	2	33800.0
<i>Thymus serpyllum</i> Creeping Thyme	1	12400.0
<i>Tilia</i> sp. Linden; Basswood; Lime	2	
<i>Trifolium pratense</i> Purple Clover; Red Clover; Peavine Clover; Cowgrass	2	
<i>Triticum aestivum</i> Wheat	3	30.0
<i>Tropaeolum majus</i> Nasturtium	1	
<i>Turnera diffusa</i> Damiana	1	14000.0
<i>Uncaria tomentosa</i> Garabato Amarillo; Una de Gato; Cat's Claw	1	
<i>Uncaria guianensis</i> Ungunagi; Cat's Claw; Tambor Huasca; Garabato Colorado; Una de Gato	1	
<i>Urtica dioica</i> European Nettle; Stinging Nettle	2	
<i>Vaccinium vitis-idaea</i> Cowberry; Lingonberry; Lingen	2	180000.0
<i>Vaccinium myrtillus</i> Whortleberry; Dwarf Bilberry; Bilberry	4	
<i>Vaccinium macrocarpon</i> Cranberry; American Cranberry; Large Cranberry	1	
<i>Vaccinium corymbosum</i> Blueberry	2	6000.0
<i>Valeriana officinalis</i> Common Valerian; Garden-Heliotrope; Valerian	2	
<i>Vanilla planifolia</i> Bourbon Vanilla; Vanilla	1	
<i>Verbena officinalis</i> Vervain	1	20000.0
<i>Viburnum prunifolium</i> Black Haw	2	
<i>Viburnum opulus</i> Crampbark; Guelder Rose; Snowballbush; European Cranberry Bush	3	

Plant	# Chemicals	Total PPM
<i>Vicia faba</i> Faba Bean; Broadbean; Habas	1	
<i>Vinca minor</i> Periwinkle; Running-Myrtle	1	
<i>Viscum album</i> European Mistletoe	1	
<i>Vitis vinifera</i> Wine Grape; Grape; European Grape; Parra (Sp.); Weinrebe (Ger.); Vid (Sp.); Vigne Vinifere (Fr.); Grapevine	3	
<i>Withania somnifera</i> Ashwagandha	1	
<i>Zea mays</i> Corn	3	1.4
<i>Zingiber officinale</i> Ginger	2	