

A Dye

*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>Abies spectabilis</i>	1	
<i>Abies alba</i> Silver-Fir	1	
<i>Acacia nilotica</i> Babul	3	
<i>Acacia catechu</i> Black Cutch; Catechu	2	
<i>Achillea millefolium</i> Yarrow; Milfoil	3	
<i>Achyranthes aspera</i> Chaff Flower	1	
<i>Aconitum napellus</i> Bear's-Foot; Garden Wolfsbane; Queen's Fettle; Garden Monkshood; Helmet Flower; Blue Rocket; European Aconite; Aconite; Friar's Cap; Soldier's Cap; Monkshood; Turk's Cap	1	
<i>Actinidia chinensis</i> Kiwi	1	
<i>Adonis vernalis</i> Spring Adonis	1	
<i>Aesculus hippocastanum</i> Horse Chestnut	2	
<i>Agastache pallidiflora</i>	1	
<i>Agave americana</i> Century Plant; Maguey	1	
<i>Agrimonia eupatoria</i> Agrimony; Sticklewort	1	
<i>Allium schoenoprasum</i> Chives	1	
<i>Allium sativum</i> var. <i>sativum</i> Garlic	3	
<i>Allium cepa</i> Onion; Shallot	3	
<i>Alocasia macrorrhiza</i> Giant Taro	1	
<i>Aloe vera</i> Bitter Aloes; Aloe	1	
<i>Althaea officinalis</i> White Mallow; Marshmallow	1	
<i>Ammi visnaga</i> Visnaga	2	
<i>Anacardium occidentale</i> Cashew	1	
<i>Anethum graveolens</i> Dill; Garden Dill	1	
<i>Angelica sinensis</i> Dang Qui; Dang Quai; Dong Quai; Chinese Angelica; Dang Gui; Dong Gui	1	
<i>Angelica archangelica</i> Angelica; Garden Angelica; Wild Parsnip	1	
<i>Anogeissus latifolia</i> Gum Ghatti	2	
<i>Apium graveolens</i> Celery	2	
<i>Arctostaphylos uva-ursi</i> Bearberry; Uva Ursi	1	
<i>Ardisia japonica</i> Marlberry	1	
<i>Arnica montana</i> Mountain Tobacco; Leopard's-Bane	1	
<i>Artemisia dracuncululus</i> Tarragon	2	
<i>Artemisia annua</i> Sweet Annie; Sweet Wormwood (GRIN); Annual Mugwort (GRIN); Annual Wormwood (GRIN); Qinghao	1	
<i>Artocarpus heterophyllus</i> Jackfruit	1	
<i>Arundo donax</i> Giant Reed	1	
<i>Asparagus officinalis</i> Asparagus	1	
<i>Atropa bella-donna</i> Belladonna	1	
<i>Averrhoa carambola</i> Star Fruit; Carambola	1	
<i>Azadirachta indica</i> Neem	1	
<i>Balanites aegyptiacus</i> Desert Date; hingotia (India); Soapberry Tree; dattier du desert (Fr.); dattier sauvage (Fr.); Zachunbaum (Ger.); lalo (India); heglük (Fr.); betu (India); mirobalano de Egipto (Sp.); zachun (India)	1	

Plant	# Chemicals	Total PPM
<i>Beta vulgaris</i> Beet; Sugar Beet; Garden Beet; Beetroot	1	
<i>Bixa orellana</i> Annatto; Arnato; Annato; Lipsticktree; Lipstick Pod; Achiote; Bija; Annoto	1	260000.0
<i>Brassica oleracea</i> var. <i>sabellica</i> I. Kale; Kitchen Kale; Scotch Kale; Curly Kale	1	
<i>Brassica oleracea</i> var. <i>italica</i> Asparagus Broccoli; Calabrese; Purple Cauliflower; Heading Broccoli; Broccoli; Cape Broccoli; Sprouting Broccoli; Winter Broccoli	3	
<i>Brassica oleracea</i> var. <i>gemmifera</i> Brussel-Sprout; Brussels-Sprouts	1	
<i>Brassica oleracea</i> var. <i>capitata</i> I. White Cabbage; Red Cabbage; Cabbage	1	
<i>Brassica oleracea</i> var. <i>botrytis</i> I. Cauliflower	3	
<i>Calea zacatechichi</i> Mexican Calea; Bitter Grass; Dog's Grass	1	
<i>Camellia sinensis</i> Tea	2	
<i>Capparis spinosa</i> Caperbush; Caper	1	
<i>Capsella bursa-pastoris</i> Shepherd's Purse	1	
<i>Capsicum frutescens</i> Red Chili; Cayenne; Tabasco; Spur Pepper; Hot Pepper; Chili	1	
<i>Capsicum annuum</i> Green Pepper; Sweet Pepper; Paprika; Cherry Pepper; Cone Pepper; Bell Pepper	2	
<i>Carthamus tinctorius</i> Safflower	1	12000.0
<i>Carum carvi</i> Kummel (Ger.); Comino de prado (Sp.); Carum; Comino (Sp.); Caraway	1	
<i>Catalpa ovata</i> Kisasage; Hsin-Pa-Pi	1	
<i>Caulophyllum thalictroides</i> Blue Cohosh	1	
<i>Ceratonia siliqua</i> St.John's-Bread; Locust Bean; Carob	2	32200.0
<i>Chelidonium majus</i> Celandine	1	
<i>Cichorium intybus</i> Chicory; Witloof; Succory	1	
<i>Cinchona pubescens</i> Red Cinchona; Red Peruvian-Bark; Redbark; Quinine	2	
<i>Citrullus colocynthis</i> Colocynth	1	
<i>Citrus sinensis</i> Orange	3	
<i>Citrus paradisi</i> Grapefruit	1	
<i>Citrus aurantiifolia</i> Lime	1	
<i>Cocos nucifera</i> Copra; Coconut; Cocotero (Sp.); Coconut Palm; Kokospalme (Ger.); Nariyal	1	
<i>Commiphora wightii</i> Guggul; Indian Bdellium-Tree	1	
<i>Commiphora myrrha</i> Myrrhe (Fr., Ger.); Mirra (Sp. It.); Herabol Myrrh; African Myrrh; Somali Myrrh; Myrrh	1	
<i>Conium maculatum</i> Spotted Hemlock; Fool's Parsley; Carrot Fern; Spotted Parsley; Hemlock; Poison Hemlock	1	92000.0
<i>Conyza canadensis</i> Hogweed; Horseweed; Butterweed	1	
<i>Coriandrum sativum</i> Cilantro; Coriander; Chinese Parsley	1	
<i>Coriaria thymifolia</i> Ground Toot; Shanshi	1	
<i>Coriaria myrtifolia</i> Mealy Tree	1	
<i>Corylus avellana</i> European Filbert; English Filbert; European Hazel; Cobnut; Hazel	1	
<i>Costus speciosus</i> Cane Reed; Wild Ginger; Crepe Ginger	1	
<i>Crataegus rhipidophylla</i> Hawthorn	1	
<i>Crataegus laevigata</i> Whitethorn; Hawthorn; Woodland Hawthorn; English Hawthorn	1	
<i>Crocus sativus</i> Saffron	1	
<i>Curcuma zedoaria</i> Shoti; Zedoary	1	2000.0
<i>Curcuma xanthorrhiza</i> Javan Turmeric; Temu Lawak	1	20000.0
<i>Curcuma longa</i> Indian Saffron; Turmeric	1	94888.0

Plant	# Chemicals	Total PPM
<i>Cycas revoluta</i> Sago Cycas	1	
<i>Daphne genkwa</i> Yuan Hua	1	
<i>Datura stramonium</i> Jimsonweed	1	
<i>Daucus carota</i> Carrot	4	
<i>Dianthus barbatus</i> Sweet William	1	
<i>Digitalis purpurea</i> Purple Foxglove	1	
<i>Duboisia myoporoides</i> Pituri; Corkwood Tree	1	
<i>Equisetum arvense</i> Field Horsetail; Horsetail	1	
<i>Eriobotrya japonica</i> Loquat	1	
<i>Erythroxylum coca</i> Coca	1	
<i>Eschscholzia californica</i> California Poppy	2	
<i>Eucalyptus globulus</i> Blue Gum; Tasmanian Bluegum; Eucalypt	2	
<i>Eucommia ulmoides</i> Tu Chung; Gutta-Percha Tree; Du Zhong	1	
<i>Euphorbia tirucalli</i> Aveloz	1	
<i>Euphorbia hirta</i> Queensland Asthma Herb	1	
<i>Fagopyrum esculentum</i> Buckwheat	1	
<i>Fallopia japonica</i> Hu-Zhang; Japanese Knotweed; Mexican Bamboo; Giant Knotweed	1	
<i>Ficus carica</i> Higuera Comun (Sp.); Higo (Sp.); Figuier Commun (Fr.); Fig; Fico (Ital.); Feigenbaum (Ger.); Figueira (Port.); Echte Feige (Ger.)	2	
<i>Fragaria spp</i> Strawberry	1	
<i>Fritillaria thunbergii</i> Fritillary; Bei-Mu	1	
<i>Fucus vesiculosus</i> Kelp; Bladderwrack	1	
<i>Galega officinalis</i> Galega; Goat's Rue	1	
<i>Garcinia mangostana</i> Mangosteen; Mangostin	1	
<i>Garcinia cambogia</i> Garcinia; Brindleberry; Malabar Tamarind	1	
<i>Gardenia jasminoides</i> Cape Jasmine; Shan-Chih-Tzu; Jasmin; Gardenia; Zhi Zi; Shan-Zhi-Zi	1	
<i>Geranium thunbergii</i> Oriental Geranium; Gennoshiouko	2	
<i>Ginkgo biloba</i> Ginkgo; Maidenhair Tree	3	
<i>Glechoma hederacea</i> Alehoof	1	
<i>Glycine max</i> Soybean	4	
<i>Haematoxylum campechianum</i> Campechy; Logwood	1	
<i>Hamamelis virginiana</i> Witch Hazel	1	
<i>Helianthus annuus</i> Sunflower; Girasol	1	
<i>Hibiscus sabdariffa</i> Roselle; Acedera de Guinea (Sp.); Rosella (Ger.); Malventee (Ger.); Indian Sorrel; Red Sorrel; Rosa de Jamaica (Sp.); Jamaica Sorrel; Kharkadi; Sereni (Sp.); Sorrel	1	
<i>Hippophae rhamnoides</i> Sallow Thorn; Yellow Spine; Sea Buckthorn	1	
<i>Houttuynia cordata</i> Yu Xing Cao; Fishwort; Dokudami	1	
<i>Humulus lupulus</i> Hops	1	
<i>Hypericum perforatum</i> Hypericum; St. John's-wort; Goatweed; Common St. Johnswort; Klamath Weed	3	
<i>Ilex paraguariensis</i> South American Holly; Mate; Paraguay Tea	1	38000.0
<i>Jatropha curcas</i> Physic Nut; Purging Nut	1	
<i>Juglans regia</i> English Walnut	2	
<i>Juglans nigra</i> Black Walnut	1	

Plant	# Chemicals	Total PPM
<i>Juglans cinerea</i> Butternut	1	
<i>Juniperus macropoda</i> Himalayan Juniper; Indian Juniper	1	
<i>Juniperus communis</i> Common Juniper; Juniper	1	
<i>Kalanchoe pinnata</i> Air Plant; Siempre Viva	1	
<i>Kalanchoe daegrिमontiana</i> Devil's-Backbone	1	
<i>Laurus nobilis</i> Laurel; Bay; Bay Laurel; Sweet Bay; Grecian Laurel; Bayleaf	1	
<i>Lawsonia inermis</i> Mignonette Tree; Mignonette; Jamaica-Mignonette; Henna	2	100000.0
<i>Leonurus cardiaca</i> Motherwort	1	
<i>Liquidambar styraciflua</i> Sweetgum; American Styra	1	
<i>Lupinus albus</i> White Lupine	1	
<i>Lycopersicon esculentum</i> Tomato	3	60.0
<i>Maclura pomifera</i> Osage-Orange; Hedge Apple	2	
<i>Mahonia japonica</i> Hiiragi-Nanten; Japanese Ashberry	1	
<i>Malus domestica</i> Apple	4	2.0
<i>Mangifera indica</i> Mango	1	
<i>Matricaria recutita</i> German Camomile; Annual Camomile; Wild Camomile	1	
<i>Medicago sativa</i> Lucerne; Alfalfa	3	
<i>Melia azedarach</i> Chinaberry	1	
<i>Melissa officinalis</i> Melissa; Bee Balm; Lemonbalm; Balm	1	
<i>Mentha longifolia</i> Biblical Mint	1	
<i>Mercurialis annua</i> Annual Mercury	1	
<i>Morinda citrifolia</i> Noni; Indian Mulberry	1	
<i>Morus alba</i> White Mulberry; Sang-Pai-Pi	4	8800.0
<i>Musa x paradisiaca</i> Banana; Plantain	3	206.0
<i>Nerium oleander</i> Oleander	1	
<i>Nicotiana tabacum</i> Tobacco	3	
<i>Ocimum tenuiflorum</i> Anise-Scented Basil	1	
<i>Ocimum sanctum</i> Holy Basil; Tulsi	1	
<i>Ocimum basilicum</i> Basil; Sweet Basil; Cuban Basil	2	
<i>Oenanthe aquatica</i> Water Fennel; Water Hemlock	1	
<i>Ononis spinosa</i> Restharrow; Hauhechel (Ger.); Spiny Restharrow	1	
<i>Opuntia ficus-indica</i> Prickly Pear; Nopal; Nopalito; Indian Fig	3	
<i>Oryza sativa</i> Rice	1	
<i>Panax quinquefolius</i> American Ginseng; Ginseng	2	80000.0
<i>Panax ginseng</i> Korean Ginseng; Oriental Ginseng; Chinese Ginseng; Ginseng	3	
<i>Papaver somniferum</i> Opium Poppy; Poppyseed Poppy	1	
<i>Petroselinum crispum</i> Parsley	1	
<i>Phaseolus vulgaris</i> Pop Bean; Snap Bean; String Bean; Haricot Bean; Black Bean; Wax Bean; Green Bean; Flageolet Bean; Navy Bean; French Bean; Garden Bean; Field Bean; Haricot Vert; Dwarf Bean; Kidney Bean; Haricot; Popping Bean	1	
<i>Phoenix dactylifera</i> Date Palm	2	820.0
<i>Phyllanthus niruri</i> Seed On The Leaf	1	
<i>Physalis ixocarpa</i> Tomatillo	1	40.0

Plant	# Chemicals	Total PPM
<i>Phytolacca americana</i> Pokeweed	1	
<i>Pimenta dioica</i> Pimento; Clover-Pepper; Pimenta; Jamaica-Pepper; Allspice	1	
<i>Pinus sylvestris</i> Scotch Pine	1	400.0
<i>Pinus mugo</i> Dwarf Pine; Swiss Mountain Pine	1	
<i>Piper nigrum</i> Black Pepper; White Pepper; Pepper	2	
<i>Piscidia piscipula</i> Jamaica Dogwood	1	
<i>Pistacia vera</i> Pistachio	1	
<i>Pisum sativum</i> Pea	2	
<i>Plantago ovata</i> Ispaghula; Psyllium; Indian Plantago; Spogel Seeds; Blond Psyllium	1	
<i>Plantago major</i> Common Plantain	1	
<i>Plantago asiatica</i> Asian Plantain	1	
<i>Platycodon grandiflorum</i> Balloon Flower; Chieh-Keng; Jie-Geng	1	
<i>Plumeria acutifolia</i> Frangipani	1	
<i>Pogostemon cablin</i> Patchouli	1	
<i>Polygala senega</i> Seneca Snakeroot; Senega	1	
<i>Polygonum hydropiper</i> Common Smartweed	1	
<i>Polygonum aviculare</i> Prostrate Knotweed	1	
<i>Populus tacamahacca</i> Balm Of Gilead	1	
<i>Portulaca oleracea</i> Verdolaga; Purslane	1	
<i>Prunus spinosa</i> Sloe; Blackthorn	1	
<i>Prunus persica</i> Peach	1	
<i>Prunus dulcis</i> Almond	1	
<i>Prunus domestica</i> Plum	1	
<i>Prunus cerasus</i> Sour Cherry	2	
<i>Prunus armeniaca</i> Apricot	3	
<i>Psidium guajava</i> Guava	2	
<i>Pteridium aquilinum</i> Bracken Fern; Bracken	2	
<i>Pueraria pseudohirsuta</i> Chinese Kudzu	1	
<i>Pueraria montana</i> Kudsu; Kudzu	1	
<i>Punica granatum</i> Zakuro (Jap.); Romanzeiro (Port.); Granatapfelbaum (Ger.); Granatapfelstrauch (Ger.); Pomegranate; Mangrano (Sp.); Granado (Sp.); Grenadier (Fr.)	1	
<i>Quercus velutina</i> Black Oak	1	
<i>Quercus alba</i> White Oak	1	
<i>Quisqualis indica</i> Rangoon Creeper	1	
<i>Rheum rhabarbarum</i> Rhubarb	1	
<i>Rheum palmatum</i> Chinese Rhubarb	2	
<i>Rhizophora mangle</i> Red Mangrove	1	4460.0
<i>Rhus coriaria</i> Sumac; Tanner's Sumac; Sicilian Sumac	1	
<i>Ribes rubrum</i> White Currant; Red Currant	1	
<i>Ribes nigrum</i> Black Currant	1	
<i>Ricinus communis</i> Castorbean	2	
<i>Robinia pseudoacacia</i> Black Locust	1	
<i>Rosa multiflora</i> Multiflora Rose	1	

Plant	# Chemicals	Total PPM
<i>Rosa gallica</i> French Rose	1	
<i>Rosa damascena</i> Damask Rose	1	
<i>Rosa centifolia</i> Cabbage Rose	1	
<i>Rosa canina</i> Dogbrier; Rose; Dog Rose	3	
<i>Rubia cordifolia</i> Madder	2	
<i>Rubus</i> sp.	1	
<i>Rubus idaeus</i> Raspberry; Red Raspberry	2	
<i>Rubus fruticosus</i> Blackberry	1	
<i>Rumex crispus</i> Curly Dock; Sour Dock; Lengua De Vaca; Yellow Dock	1	
<i>Salix alba</i> White Willow	1	
<i>Sarcostemma acidum</i> Soma	1	
<i>Senna obtusifolia</i> Sicklepod	1	4920.0
<i>Serenoa repens</i> Scrub-Palmetto; Saw Palmetto	1	
<i>Solanum tuberosum</i> Potato	1	
<i>Solidago virgaurea</i> Woundwort; European Goldenrod	1	
<i>Solidago gigantea</i> Early Goldenrod	1	
<i>Sophora pachycarpa</i> Siberian Pachycarpa	1	
<i>Sorbus aucubaria</i> Rowan Berry	1	
<i>Spinacia oleracea</i> Spinach	2	
<i>Stevia rebaudiana</i> Ca-A-E; Sweet Leaf of Paraguay; Stevia	2	
<i>Strychnos nux-vomica</i> Strychnine; Nux-Vomica	1	
<i>Symphytum officinale</i> Comfrey	1	
<i>Syzygium aromaticum</i> Clovetree; Clove	1	
<i>Tagetes patula</i> French Marigold	1	
<i>Tagetes minuta</i> Aztec Marigold; Stinking-Roger; Mexican Marigold; Muster John Henry; Wild Marigold; Dwarf Marigold	1	
<i>Tagetes lucida</i> Anise Marigold; Sweet-Mace; Sweet-Scent Marigold; Sweet-Scent Mexican Marigold	1	
<i>Tagetes erecta</i> Aztec Marigold; Marigold	1	
<i>Tamarindus indica</i> Indian Tamarind; Kilytree; Tamarind	1	
<i>Taraxacum officinale</i> Dandelion	1	
<i>Terminalia chebula</i> Ink Nut; Myrobalan; Black Myrobalan; Chebulic Myrobalan	2	
<i>Tetrapanax papyrifera</i> Tung-Tsao; Tong-Cao; Rice Paper Tree	1	
<i>Teucrium polium</i> Golden Germander	1	
<i>Theobroma cacao</i> Cacao	2	
<i>Thuja occidentalis</i> Arbor-Vitae; Northern White-Cedar	1	
<i>Tilia</i> sp. Basswood; Linden; Lime	1	
<i>Tragopogon porrifolius</i> Salsify	1	
<i>Trifolium pratense</i> Peavine Clover; Purple Clover; Cowgrass; Red Clover	2	
<i>Trigonella foenum-graecum</i> Fenugreek; Greek Clover; Bockshornklee (Ger.); Alholva (Sp.); Greek Hay	2	
<i>Triticum aestivum</i> Wheat	1	
<i>Turnera diffusa</i> Damiana	1	160000.0
<i>Tussilago farfara</i> Coltsfoot	1	
<i>Urginea maritima</i> European Squill	1	

Plant	# Chemicals	Total PPM
<i>Urginea indica</i> Indian Squill; Sea-Onion	1	
<i>Urtica dioica</i> Stinging Nettle; European Nettle	2	
<i>Vaccinium myrtillus</i> Bilberry; Whortleberry; Dwarf Bilberry	2	
<i>Vaccinium macrocarpon</i> American Cranberry; Large Cranberry; Cranberry	1	
<i>Vaccinium corymbosum</i> Blueberry	1	
<i>Vigna radiata</i> Mungbean; Green Gram	1	
<i>Viola tricolor</i> Wild Violet; Pansy	1	
<i>Vitex agnus-castus</i> Chaste-Tree	1	
<i>Vitis vinifera</i> Wine Grape; Vid (Sp.); Grape; Grapevine; Parra (Sp.); Vigne Vinifere (Fr.); European Grape; Weinrebe (Ger.)	3	
<i>Zea mays</i> Corn	2	
<i>Zingiber officinale</i> Ginger	1	