

A Piscicide

*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 farnesiana Huisache; Sweet Acacia; Opopanax; Popinac; Cassie	1	
Achyranthes bidentata Chaff Flower	1	
Achyranthes aspera Chaff Flower	1	
Agastache rugosa	2	
Agave sisalana Mescal; Sisal; Sisal Hemp; Sisal Agave; Hemp Plant	1	
Agave americana Century Plant; Maguey	1	10000.0
Ageratum conyzoides Mexican ageratum	1	
Agrimonia eupatoria Agrimony; Sticklewort	1	12000.0
Akebia quinata Chocolate Vine	1	
Albizia lebeck Siris Tree; Frywood; Lebbek Tree; East Indian Walnut; Women's-Tongue Tree; Lebbek; Koko	1	
Allium sativum var. sativum Garlic	1	
Allium cepa Onion; Shallot	1	
Aloe vera Aloe; Bitter Aloes	1	
Althaea officinalis White Mallow; Marshmallow	1	
Ammi visnaga Visnaga	3	
Ammi majus Bishop's Weed	5	62202.0
Anamirta cocculus Levant Berry	1	100000.0
Anethum graveolens Garden Dill; Dill	2	
Angelica sinensis Dong Gui; Chinese Angelica; Dong Quai; Dang Quai; Dang Qui; Dang Gui	1	
Angelica dahurica Bai Zhi	2	
Angelica archangelica Garden Angelica; Angelica; Wild Parsnip	4	13762.0
Apium graveolens Celery	5	1412.1899999999998
Apocynum cannabinum Spreading Dogbane; Bitterroot	1	
Arbutus unedo Strawberry Tree; Arbutus	1	
Arctostaphylos uva-ursi Uva Ursi; Bearberry	2	15000.0
Arnica montana Mountain Tobacco; Leopard's-Bane	1	
Artemisia vulgaris Mugwort	1	
Artemisia dracunculus Tarragon	1	
Artemisia capillaris Capillary Wormwood	1	
Artemisia annua Annual Wormwood (GRIN); Qinghao; Annual Mugwort (GRIN); Sweet Wormwood (GRIN); Sweet Annie	2	
Artocarpus heterophyllus Jackfruit	1	
Astragalus membranaceus Huang Qi; Huang-Chi	1	
Balanites aegyptiacus dattier du desert (Fr.); hingotia (India); zachun (India); heglik (Fr.); Soapberry Tree; Desert Date; betu (India); mirobalano de Egipto (Sp.); dattier sauvage (Fr.); Zachunbaum (Ger.); lalo (India)	1	
Berberis vulgaris Barberry	1	
Calendula officinalis Calendula; Pot-Marigold	1	
Capparis spinosa Caperbush; Caper	1	
Carum carvi Caraway; Carum; Comino (Sp.); Comino de prado (Sp.); Kummel (Ger.)	1	
Casimiroa edulis Matasano; White sapote	2	
Catalpa bignonioides Indian bean	1	

Plant	# Chemicals	Total PPM
<i>Catharanthus roseus</i> Madagascar Periwinkle; Rosy Periwinkle	2	
<i>Centaurium erythraea</i> Centaury	1	
<i>Chenopodium quinoa</i>	1	
<i>Chenopodium album</i> Lambsquarter	3	
<i>Chimaphila umbellata</i> King's Cure; Pipsissewa	2	
<i>Chrysanthemum x morifolium</i> Mum; Florist's Chrysanthemum; Ju Hua (Pinyin); Chrysanthemum	1	
<i>Cichorium intybus</i> Witloof; Chicory; Succory	1	
<i>Cinnamomum verum</i> Ceylon Cinnamon; Cinnamon	1	
<i>Cinnamomum aromaticum</i> Cassia; Saigon Cinnamon; Cassia Bark; Canela de la China (Sp.); Cannelier de Chine (Fr.); Canelle de Cochinchine (Fr.); Canelero chino (Sp.); China Junk Cassia; Chinesischer Zimtbaum (Ger.); Cassia Lignea; Chinazimt (Ger.); Kashiya-Keihi (Jap.); Chinese Cinnamon; Cannelier Casse (Fr.); Zimtcassie (Ger.); Chinese Cassia	1	
<i>Citrullus colocynthis</i> Colocynth	1	
<i>Citrus sinensis</i> Orange	1	
<i>Citrus meyerii</i> Meyer lemon	1	
<i>Citrus limon</i> Lemon	3	
<i>Citrus aurantium</i> Petitgrain; Bitter Orange	2	
<i>Citrus aurantiifolia</i> Lime	3	
<i>Cnicus benedictus</i> Blessed Thistle	2	
<i>Coriandrum sativum</i> Cilantro; Chinese Parsley; Coriander	2	
<i>Cornus officinalis</i> Chinese Dogwood	2	
<i>Cornus mas</i> Cornelian Cherry; Sorbet	1	
<i>Cornus florida</i> American Dogwood	1	
<i>Crataegus rhipidophylla</i> Hawthorn	1	
<i>Crataegus monogyna</i> Hawthorn; English Hawthorn	2	
<i>Crataegus laevigata</i> Whitethorn; English Hawthorn; Hawthorn; Woodland Hawthorn	2	
<i>Crataegus cuneata</i> Hawthorn	1	
<i>Crocus sativus</i> Saffron	1	
<i>Cryptostegia grandifolia</i> Rubber Vine	1	
<i>Cyperus rotundus</i> Nutsedge	1	
<i>Daemonorops draco</i> Dragon's Blood	1	
<i>Daucus carota</i> Carrot	4	4.4
<i>Dictamnus albus</i> Dittany; Akgiritotu; Burning Bush; Gas Plant; Gazelotu	2	
<i>Dioscorea</i> sp. Wild Yam	1	
<i>Dipteryx odorata</i> Tonka Bean; Dutch Tonka Bean	1	70000.0
<i>Duboisia myoporoides</i> Corkwood Tree; Pituri	1	
<i>Duchesnea indica</i> Mock Strawberry; Indian Strawberry; False Strawberry	1	
<i>Elaeagnus pungens</i> Thorny Silver Berry	2	
<i>Elaeagnus angustifolia</i> Russian Olive; Silver Berry	1	
<i>Eleutherococcus senticosus</i> Ci wu jia (Pinyin); Wu jia; Siberian Ginseng; Eleuthero Ginseng; Spiny Ginseng	2	
<i>Eriobotrya japonica</i> Loquat	2	
<i>Eucalyptus grandis</i> Rose Gum; Flooded Gum; Gum	1	
<i>Eucalyptus globulus</i> Blue Gum; Eucalypt; Tasmanian Bluegum	2	
<i>Eucalyptus citriodora</i> Citron-Scented Gum; Lemon Eucalyptus; Lemon-Scented Gum; Spotted Gum	1	

Plant	# Chemicals	Total PPM
<i>Eupatorium triplinerve</i> Triplinerved eupatorium	1	
<i>Eupatorium perfoliatum</i> Boneset	1	
<i>Ferula assa-foetida</i> Asafetida; Asafetida (Sp.); Assa-foetida; test; Devil's Dung; Asafoetida; Stinkasant (Ger.)	1	
<i>Ferula alliacea</i> Garlic Ferula	2	
<i>Ficus carica</i> Fig; Figuier Commun (Fr.); Figueira (Port.); Echte Feige (Ger.); Fico (Ital.); Feigenbaum (Ger.); Higuera Comun (Sp.); Higo (Sp.)	3	14200.0
<i>Filipendula ulmaria</i> Queen Of The Meadow; Meadowsweet	1	
<i>Foeniculum vulgare</i> Fennel	5	8.0
<i>Forsythia suspensa</i> Lien-Chiao; Lian-Jiao	2	
<i>Fragaria</i> spp Strawberry	1	
<i>Galium odoratum</i> Waldmeister; Woodruff	1	26000.0
<i>Gardenia jasminoides</i> Jasmin; Zhi Zi; Shan-Zhi-Zi; Gardenia; Shan-Chih-Tzu; Cape Jasmine	1	
<i>Gaultheria procumbens</i> Wintergrun (Ger.); Wintergreen; Checkerberry; Creeping Wintergreen; Teaberry; Mountain Tea	1	
<i>Gaultheria fragrantissima</i> Indian Wintergreen	1	
<i>Glechoma hederacea</i> Alehoof	2	1052.0
<i>Glehnia littoralis</i> Bei Sha Shen	3	
<i>Glycyrrhiza glabra</i> Commom Licorice; Smooth Licorice; Licorice-Root; Licorice	2	
<i>Harpagophytum procumbens</i> Grapple Plant; Devil's Claw	2	
<i>Hedera helix</i> Ivy	1	
<i>Helianthus annuus</i> Sunflower; Girasol	1	
<i>Helichrysum angustifolium</i> Immortelle; Everlasting	1	
<i>Heracleum sphondylium</i> Hogweed; Meadow Parsnip; Cow Parsnip	1	
<i>Heracleum laciniatum</i> Lacinate Cow-parsnip	2	
<i>Hierochloe odorata</i> Vanilla Grass; Holy Grass; Sweet Grass; Vanilla-Scented Grass; Manna Grass; Seneca Grass	1	
<i>Holarrhena pubescens</i> Tellicherry Bark; Conessi; Zhi Xie Mu; Kurchi	1	
<i>Hordeum vulgare</i> Barleygrass; Barley	1	
<i>Houttuynia cordata</i> Yu Xing Cao; Fishwort; Dokudami	1	
<i>Humulus lupulus</i> Hops	2	
<i>Hura crepitans</i> Sandbox Tree	1	
<i>Hyoscyamus niger</i> Henbane	1	
<i>Hyptis verticillata</i> Barrehorno; John Charles	1	
<i>Hyptis capitata</i> Knobweed	1	
<i>Hyssopus officinalis</i> Hyssop	2	9800.0
<i>Ilex paraguariensis</i> Mate; South American Holly; Paraguay Tea	1	
<i>Illicium verum</i> Chinese Star Anise; anis de China (Sp.); Sternanis (Ger.); Star Anise; Chinesischer Sternanis (Ger.); anis estrellado (Sp.)	2	1700.0
<i>Inula helenium</i> Elecampane	1	
<i>Juniperus virginiana</i> Red Cedar	1	
<i>Juniperus sabina</i> Sabine	1	
<i>Justicia pectoralis</i> Curia; Bolek Hena; Angel Of Death	1	
<i>Lantana camara</i> Lantana; Wild Sage	1	
<i>Lavandula x intermedia</i> Lavandin; Dutch Lavender	1	
<i>Lavandula latifolia</i> Spike Lavender; Aspic; Broad-Leaved Lavender	3	47844.0

Plant	# Chemicals	Total PPM
<i>Lavandula angustifolia</i> English Lavender	2	17000.0
<i>Leonurus cardiaca</i> Motherwort	2	
<i>Levisticum officinale</i> Lovage	3	26.0
<i>Ligustrum lucidum</i> Glossy Privet; <i>Ligustri Fructus</i> ; White Waxtree; Privet; Chinese Privet	2	
<i>Ligustrum japonicum</i> Japanese Privet; <i>Ligustri Fructus</i>	2	
<i>Limonia acidissima</i> Manzana De Elefante; Wood-Apple; Elephant Apple	3	
<i>Liquidambar styraciflua</i> Sweetgum; American Styrax	1	
<i>Liquidambar orientalis</i> Oriental Styrax; Oriental Storax	1	
<i>Luffa aegyptiaca</i> Luffa; Smooth Loofah; Vegetable Sponge	1	
<i>Lycopus europeus</i> European Bugle	2	2400.0
<i>Maclura pomifera</i> Osage-Orange; Hedge Apple	1	
<i>Malus domestica</i> Apple	1	
<i>Marrubium vulgare</i> Horehound; White Horehound	1	2400.0
<i>Matricaria recutita</i> Annual Camomile; Wild Camomile; German Camomile	1	
<i>Melaleuca leucadendra</i> Cajeput	2	
<i>Melilotus officinalis</i> Yellow Sweetclover	2	4000.0
<i>Melissa officinalis</i> Bee Balm; Melissa; Balm; Lemonbalm	2	
<i>Mentha x rotundifolia</i> Applemint	2	
<i>Mentha x piperita</i> Peppermint	1	0.4
<i>Mentha spicata</i> Hortela da Folha Miuda; Spearmint	2	
<i>Monarda didyma</i> Oswego Tea; Beebalm	1	
<i>Morinda citrifolia</i> Noni; Indian Mulberry	1	
<i>Morus alba</i> White Mulberry; Sang-Pai-Pi	1	
<i>Murraya koenigii</i> Curry Leaf; Curry Leaf Tree; Indian Curry Tree	2	
<i>Myristica fragrans</i> Muskatnussbaum (Ger.); nuez moscada (Sp.); Mace; nogal moscado (Sp.); Nutmeg	1	
<i>Myroxylon balsamum</i> Peru Balsam; Tolu Balsam	2	8000.0
<i>Nepeta cataria</i> Catnip	1	
<i>Nerium oleander</i> Oleander	2	86000.0
<i>Ocimum tenuiflorum</i> Anise-Scented Basil	2	
<i>Ocimum suave</i> Kenyan Tree Basil	1	
<i>Ocimum canum</i> Hoary Basil	1	
<i>Ocimum basilicum</i> Basil; Sweet Basil; Cuban Basil	2	7896.0
<i>Olea europaea</i> Olive	1	
<i>Origanum vulgare</i> Pot Marjoram; Oregano; Wild Marjoram; Common Turkish Oregano; Wild Oregano; European Oregano	2	6200.0
<i>Origanum majorana</i> Marjoram; Sweet Marjoram	2	13600.0
<i>Pachyrhizus erosus</i> Yambean	1	20000.0
<i>Panax quinquefolius</i> Ginseng; American Ginseng	1	
<i>Panax japonicus</i> Japanese Ginseng	1	
<i>Panax ginseng</i> Chinese Ginseng; Oriental Ginseng; Ginseng; Korean Ginseng	1	
<i>Paris polyphylla</i> Polyphyllous Paris	1	
<i>Pastinaca sativa</i> Parsnip	4	14600.0
<i>Petiveria alliacea</i> Guinea Hen Leaf; Mucura; Anamu	1	

Plant	# Chemicals	Total PPM
<i>Petroselinum crispum</i> Parsley	4	4749.06
<i>Peucedanum ostruthium</i> Masterwort	1	
<i>Peumus boldus</i> Boldo	1	5125.0
<i>Phoenix dactylifera</i> Date Palm	1	
<i>Phoradendron juniperinum</i>	1	
<i>Phyllanthus niruri</i> Seed On The Leaf	1	
<i>Phyllanthus amarus</i>	1	
<i>Phytolacca americana</i> Pokeweed	1	
<i>Pimpinella anisum</i> Sweet Cumin; Anise	5	
<i>Piscidia piscipula</i> Jamaica Dogwood	1	
<i>Pistacia lentiscus</i> Mastixbaum (Ger.); Chios Mastictree; Lentisco (Sp.); Mastictree; Mastic	1	
<i>Plantago major</i> Common Plantain	2	
<i>Plantago asiatica</i> Asian Plantain	1	
<i>Plectranthus amboinicus</i> Cuban Oregano; Soup Mint; Country Borage; Indian Borage; Spanish Thyme; Amboini Coleus; Mexican Mint; French Thyme	2	
<i>Podophyllum pleianthum</i> Chinese Mayapple	1	
<i>Podophyllum peltatum</i> Mayapple	1	24000.0
<i>Podophyllum hexandrum</i> Himalayan Mayapple	1	
<i>Polygonum hydropiper</i> Common Smartweed	1	
<i>Prosopis glandulosa</i> Mesquite; Honey Mesquite	2	
<i>Prunella vulgaris</i> Heal-All; Self-Heal	2	
<i>Prunus serotina</i> Black Cherry; Wild Cherry	1	
<i>Prunus persica</i> Peach	1	
<i>Prunus laurocerasus</i> Cherry Laurel	1	20000.0
<i>Prunus cerasus</i> Sour Cherry	3	
<i>Prunus africana</i> Bitter Almond; Red Stinkwood	2	
<i>Psidium guajava</i> Guava	2	
<i>Psoralea corylifolia</i> Malaya Tea; Babchi; Black Dot	2	
<i>Ptychopetalum olacoides</i> Muira Puama	1	
<i>Punica granatum</i> Granado (Sp.); Granatapfelbaum (Ger.); Zakuro (Jap.); Grenadier (Fr.); Romanzeiro (Port.); Granatapfelstrauch (Ger.); Pomegranate; Mangrano (Sp.)	2	
<i>Pyrus communis</i> Pear	1	
<i>Quisqualis indica</i> Rangoon Creeper	1	
<i>Rheum officinale</i> Chinese Rhubarb	1	
<i>Rhododendron ponticum</i> Pontic Alpenrose	1	
<i>Rhododendron ferrugineum</i> Rusty-Leaved Alpenrose	1	
<i>Rhododendron dauricum</i> Chinese Alpenrose	1	
<i>Rosa woodsii</i> Woods' Rose	1	
<i>Rosmarinus officinalis</i> Rosemary	2	103000.0
<i>Rubus fruticosus</i> Blackberry	1	
<i>Ruta graveolens</i> Rue	3	
<i>Salvia triloba</i> Greek Sage	2	159400.0
<i>Salvia sclarea</i> Clary Sage	2	

Plant	# Chemicals	Total PPM
<i>Salvia officinalis</i> Sage	2	5372.0
<i>Sambucus nigra</i> European Alder; Elder; European Elderberry; European Elder; Black Elder	2	
<i>Sambucus canadensis</i> Sweet Elder; Elderberry; American Elderberry; American Elder	1	
<i>Sanguisorba officinalis</i> Greater Burnet	1	
<i>Satureja montana</i> Savory; Winter Savory	2	32000.0
<i>Satureja hortensis</i> Summer Savory	2	6600.0
<i>Sesamum indicum</i> Sesame; Sesamo (Sp.); Benneseed; Beni; Ajonjoli (Sp.)	2	
<i>Skimmia arborescens</i> Skimmia	2	
<i>Solanum torvum</i> Susumba; Wild Eggplant	1	
<i>Sorbus aucubaria</i> Rowan Berry	1	
<i>Syringa vulgaris</i> Lilac	1	
<i>Syzygium claviflorum</i>	2	
<i>Syzygium aromaticum</i> Clove; Clovetree	1	40000.0
<i>Tagetes</i> sp. Marigold	1	
<i>Tecoma stans</i> Yellow Elder	1	160.0
<i>Tephrosia vogelii</i> Fish Poison Bean	3	9000.0
<i>Tephrosia virginiana</i> Devil's Shoestring	3	
<i>Tephrosia purpurea</i> Wild Indigo; Purple Tephrosia	2	14000.0
<i>Tephrosia candida</i> White Tephrosia	2	7000.0
<i>Terminalia pallida</i>	1	
<i>Terminalia catappa</i> Malabar Almond; Tropical Almond; Indian Almond	1	
<i>Terminalia arjuna</i> Arjuna; Arjun	1	
<i>Ternstroemia gymnanthera</i>	1	
<i>Teucrium scorodonia</i> Wood Germander; Germander	1	
<i>Teucrium scordium</i> Water Germander	1	
<i>Teucrium polium</i> Golden Germander	1	
<i>Teucrium chamaedrys</i> Wall Germander	1	
<i>Theobroma cacao</i> Cacao	1	
<i>Thevetia peruviana</i> Peruvian Yellow Oleander; Cabalonga (Sp.); Luckynut; Yellow Oleander; Thevetie (Ger.); Chirca (Sp.); <i>Adelfa Amarilla</i> (Sp.); <i>Oleandre Jaune</i> (Fr.); <i>Loandro-Amarelo</i> (Port.)	1	
<i>Thymus vulgaris</i> Garden Thyme; Common Thyme; Thyme	2	50200.0
<i>Thymus serpyllum</i> Creeping Thyme	2	27800.0
<i>Tribulus terrestris</i> Puncture-vine	1	
<i>Trifolium pratense</i> Cowgrass; Red Clover; Peavine Clover; Purple Clover	1	
<i>Trigonella foenum-graecum</i> Bockshornklee (Ger.); Alholva (Sp.); Fenugreek; Greek Clover; Greek Hay	2	
<i>Trilisa odoratissima</i> Vanilla Plant; Hound's Tongue; Carolina Vanilla; Deer's Tongue	1	
<i>Tsuga canadensis</i> Eastern Hemlock	1	20000.0
<i>Uncaria tomentosa</i> Garabato Amarillo; Cat's Claw; Una de Gato	2	
<i>Urtica dioica</i> European Nettle; Stinging Nettle	3	
<i>Vaccinium vitis-idaea</i> Lingonberry; Cowberry; Lingen	1	15000.0
<i>Vaccinium myrtillus</i> Whortleberry; Dwarf Bilberry; Bilberry	2	5000.0
<i>Vaccinium macrocarpon</i> American Cranberry; Cranberry; Large Cranberry	2	
<i>Vaccinium corymbosum</i> Blueberry	2	

Plant	# Chemicals	Total PPM
<i>Vanilla planifolia</i> Bourbon Vanilla; Vanilla	1	
<i>Verbascum thapsus</i> Mullein; Velvetplant; Flannelplant; Flannelleaf; Great Mullein	3	
<i>Verbena officinalis</i> Vervain	1	
<i>Viburnum prunifolium</i> Black Haw	2	
<i>Viburnum opulus</i> Snowballbush; Guelder Rose; Crampbark; European Cranberry Bush	1	
<i>Vinca minor</i> Running-Myrtle; Periwinkle	1	100800.0
<i>Viscum album</i> European Mistletoe	1	
<i>Vitis vinifera</i> Weinrebe (Ger.); Wine Grape; Vigne Vinifere (Fr.); Vid (Sp.); Grape; European Grape; Parra (Sp.); Grapevine	3	
<i>Warburgia ugandensis</i> Warburghia	2	
<i>Zanthoxylum clava-herculis</i> Hercules'-Club; West Indian Yellowwood; Southern Prickly Ash; Pepperbark	4	
<i>Zanthoxylum americanum</i> Northern Prickly Ash	2	
<i>Zea mays</i> Corn	3	
<i>Zizyphus jujuba</i> Ta-Tsao; Jujube; Da-Zao	3	6000.0