



**Association of South East Asian Nations (ASEAN)**

## ANNEX I

# ASEAN GUIDING PRINCIPLES FOR INCLUSION INTO OR EXCLUSION FROM THE NEGATIVE LIST OF SUBSTANCES FOR TRADITIONAL MEDICINES AND HEALTH SUPPLEMENTS

---



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

### DOCUMENT INFORMATION

This version is adopted at the 18th ASEAN TRADITIONAL MEDICINES AND HEALTH SUPPLEMENTS SCIENTIFIC COMMITTEE MEETING (ATSC) 11-13 March 2013, Nay Pyi Taw, Myanmar and endorsed at the 19th ACCSQ TRADITIONAL MEDICINES AND HEALTH SUPPLEMENTS PRODUCT WORKING GROUP (TMHSPWG) MEETING 28-29 June 2013, Bagan, Myanmar.

| Version No. | History of adoption and endorsement   |   | Reasons for revision   |
|-------------|---|---|--|
|             | Adoption date   | Endorsement date  |  |
| 1           | 9th ATSC Meeting<br>22-23 Nov 2010  | 14th TMHSPWG Meeting<br>24-25 Nov 2010  | -  |
| 2           | 13th ATSC Meeting<br>14-15 Nov 2011   | 16th TMHSPWG Meeting<br>17-18 Nov 2011  | Editorial changes. The word "legislations" to be replaced with "regulations" in entire document to address the concerns that may arise from legal complexities.  |
| 3           | 18th ATSC Meeting<br>11-13 Mar 2013<br>23rd ATSC Meeting<br>23-24 June 2014 | 19th TMHSPWG Meeting<br>28-29 Jun 2013<br>21st TMHSPWG Meeting<br>27-28 June 2014 | Editorial changes. To delete Clause 3 from the Guiding Principles, and to create separate negative list for TM and HS.<br>Updated the adopted list of substances |



## CONTENTS

|  |    |
|--|----|
| Purpose.....   | 3  |
| Guiding principles .....   | 3  |
| Appendices.....  | 5  |
| Appendix 1      Negative List of Substances for Traditional Medicines..... | 5  |
| Appendix 2      Negative List of Substances for Health Supplements.....    | 12 |



## PURPOSE

The ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements list the active substances that are prohibited from being used in or being part of the composition of Traditional Medicine and/or Health Supplement products. The list is prepared from the following guidelines established to govern the acceptance of active substances to the list based on scientific rationale.

## GUIDING PRINCIPLES

1. A substance must carry a scientifically demonstrated/proven safety concern that its inclusion into a Traditional Medicine and Health Supplement product will be harmful to human health<sup>1</sup>.
2. A substance that qualifies for inclusion into the list should carry the following details but not limited to:
  - 2.1. Identity of the substance
    - 2.1.1. Taxonomy classification e.g. scientific name by genus and species
    - 2.1.2. Common name/ traditional name
    - 2.1.3. CAS No
  - 2.2. Source of the substance (e.g. natural/synthetic/certain part or whole plant /animal)
  - 2.3. Rationale for inclusion (e.g. toxic<sup>2</sup> effect of the substance e.g. acute, sub-acute, chronic, specific toxicity)

<sup>1</sup> "Harmful to human health" is defined as any experience affecting the majority of a population resulting in any of the following outcomes: death, a life-threatening adverse experience, inpatient hospitalisation or prolongation of existing hospitalisation, a persistent or significant disability/incapacity, or a congenital anomaly/birth defect. Important medical events that may not result in death, be life-threatening, or require hospitalisation may be considered harmful when, based on appropriate medical judgment, they may jeopardise the individual and may require medical or surgical intervention to prevent one of the outcomes previously listed - adapted from: IOM (Institute of Medicine). *Dietary supplements: A framework for evaluating safety*. Washington, DC: The National Academies Press; 2005



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

- 2.4. References (e.g. formulary, monograph/scientific report)
3. The negative list should only include substances that are prohibited for use in a traditional medicine and/or health supplement product.
4. This negative list should not include:
  - 4.1. Substances in the ASEAN List of Restricted Additives and Excipients for Traditional Medicines and Health Supplements.
  - 4.2. Nutrients with established ASEAN maximum levels (e.g. vitamins and minerals).
  - 4.3. Naturally occurring toxic contaminants that are within established limits (e.g. lead)
  - 4.4. Substances which are prohibited under existing wildlife protection laws of all Member States.
5. Prohibited substances in the national regulations of ASEAN Member States, where applicable, are prohibited in Traditional Medicines and/or Health Supplements. Member States are recommended to propose relevant substances from their national regulation for inclusion into the ASEAN Negative List for Traditional Medicines and Health Supplements; as long as their inclusion meets the criteria set in this guideline.
6. Proposal for inclusion or exclusion of substances into the ASEAN Negative List for Traditional Medicines and Health Supplements should be based on scientific rationale pertaining to human safety concerns and not upon majority rule or the commonality of a particular substance in the existing national negative lists of each Member State.
7. Please refer to Appendix 1 for Negative List of Substances for Traditional Medicines and Appendix 2 for Negative List of Substances for Health Supplements.

---

<sup>2</sup>It is important to differentiate between potential side effects and toxic effects



## APPENDICES

### Appendix 1 NEGATIVE LIST OF SUBSTANCES FOR TRADITIONAL MEDICINES

This list is adopted at the 19th ACCSQ Traditional Medicines and Health Supplements Scientific Committee Meeting on 24-27 June 2013, Bagan, Myanmar and endorsed at the 19th ACCSQ Traditional Medicines and Health Supplements Product Working Group Meeting on 28-29 June 2013, Bagan, Myanmar.

| Scientific Name & Photos   | Common name(s)  | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in<br>TM |
|--|---|----------------------------------|---|---------------------|
| <i>Adonis vernalis</i> L.  | Pheasant's eye  | Whole plant                      | Adonitoxin                                    | Banned              |
| <i>Aristolochia</i> spp. (all species)<br>containing aristolochic acid | Birthwort, Pelican flower, Sangree<br>root, Sangrel, Serpentaria,<br>Snakeroot, Snakeweed | Whole plant                      | Aristolochic acid                             | Banned              |
| <i>Aspidosperma quebracho- blanco</i><br>Schltdl.                      | Quebracho   | Bark                             | Aspidospermine                                | Banned              |
| <i>Atropa belladonna</i> L.  | Deadly<br>Nightshade  | Whole plant                      | Scopolamine, Hyoscyamine, Atropine            | Banned              |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos   | Common name(s)  | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class             | Ban Status in<br>TM |
|--|---|----------------------------------|---|---------------------|
|  |   |                                  |   |                     |
| <i>Calotropis gigantea</i> (L.) Dryand.<br><i>Calotropis procera</i> (Aiton) Dryand. | Crown flower, Giant milkweed                          | Latex                            | Cardiac glycosides, Calotropin                            | Banned              |
| <i>Cannabis sativa</i> L.<br><i>Cannabis indica</i> Lam.                             | Marijuana   | Whole plant                      | Cannabinoids  | Banned              |
| <i>Catharanthus roseus</i> (L.) G.Don  | Vinca rosea,<br>Periwinkle<br>Madagascar,<br>Old Maid | Whole plant                      | Vinca alkaloids   | Banned              |
| <i>Chondrodendron tomentosum</i><br>Ruiz & Pav.                                      | Curare  | Stems                            | Tubocurarine chloride                                     | Banned              |
| <i>Citrullus colocynthis</i> (L.) Schrad.  | Bitter apple  | Seed, fructus                    | Curcubitacin  | Banned              |
| <i>Claviceps purpurea</i> (Fr.) Tul.   | Ergo  | Sclerotium                       | Ergot alkaloids<br>(including Ergotamine and Ergometrine) | Banned              |



ASEAN Guiding Principles for Inclusion into or Exclusion from the  
Negative List of Substances for Traditional Medicines and Health  
Supplements

| Scientific Name & Photos   | Common name(s)                                     | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class                     | Ban Status in<br>TM |
|--|--|----------------------------------|---|---------------------|
|  |  |                                  |   |                     |
| <i>Colchicum autumnale</i> L.  | Meadow saffron                                     | Seed                             | Cochicine   | Banned              |
| <i>Conium maculatum</i> L.   | Hemlock  | Whole plant                      | Coniine   | Banned              |
| <i>Delphinium staphisagria</i> L.  | Stavesacre   | Seeds                            | Delphinine,<br>Staphisine   | Banned              |
| <i>Digitalis</i> spp.<br>(all species) containing glycoside  | -  | Leaf                             | Cardiac glycoside   | Banned              |
| <i>Drimia maritima</i> (L.) Stearn<br><i>Syn. Urginea maritima</i> (L.) Baker                          | Sea squill,<br>Red squill,<br>Sea onion,<br>Squill | Bulb                             | Cardiac<br>glycoside  | Banned              |
| <i>Excoecaria agallocha</i> L.   | Blinding tree                                      | Latex                            | Excoecaria phorbol  | Banned              |
| <i>Gelsemium sempervirens</i> (L.) J.St.-Hil.<br><i>Gelsemium elegans</i> (Gardner &<br>Chapm.) Benth. | Palaung<br>Thay                                    | Root, Leaves and rhizomes        | Gelsemine &<br>Gelseminine ( <i>Gelsemium</i> Indole<br>alkaloid) | Banned              |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)                     | Harmful Animal/<br>Plant Part(s)            | Name of Harmful Compound or<br>Compound Class   | Ban Status in<br>TM |
|---|------------------------------------|---|---|---------------------|
| <b><i>Gluta usitata</i> (Wall.) Ding Hou</b><br><i>Syn. Melanorrhoea usitata</i> Wall.                                    | Vanish tree                        | Latex                                       | Urushic acid, Urushiol, Cardanol, Cardol, Anacardic acid  | Banned              |
| <b><i>Hyoscyamus muticus</i> L.</b><br><b><i>Hyoscyamus niger</i> L.</b>  | Henbane,<br>Henblain,<br>Jusquaime | Whole plant                                 | Hyoscyamine, Atropine,<br>Hyoscine  | Banned              |
| <b><i>Juniperus sabina</i> L.</b>   | Savin,<br>Savine                   | Extracted Essential oil<br>(i.e. Savin Oil) | Sabinyl acetate,<br>Sabinene, Podophyllo-toxin and others   | Banned              |
| <b><i>Larrea tridentata</i> (Sessé &amp; Moc. ex DC.) Coville</b><br><b><i>Larrea mexicana</i> Moric.</b>                 | Chaparral                          | Whole plant                                 | Main harmful compounds in chaparral<br>are Lignans, in which nordihydroguaiaretic acid (NDGA) is the major compound | Banned              |
| <b><i>Lobelia nicotianifolia</i> Roth ex Schult.</b><br><b><i>Lobelia inflata</i> L.</b><br><b><i>Lobelia tupa</i> L.</b> | Indian<br>tobacco                  | Whole plant                                 | Lobeline  | Banned              |
| <b><i>Lytta vesicatoria</i> Linn.</b>   | Spanish flies                      | Whole body, tinktur                         | Cantharidin   | Banned              |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)              | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in<br>TM    |
|---|-----------------------------|----------------------------------|---|------------------------|
| <i>Melaleuca alternifolia</i> (Maiden & Betche) Cheel                                 | Tea tree oil<br>(TTO)       | Tea tree oil                     | Tea tree oil                                  | Banned in TM<br>(oral) |
| <i>Mitragyna speciosa</i> (Korth.) Havil.   | Kratom                      | Whole plant                      | Mitragynine indole, alkaloid                  | Banned                 |
| <i>Nicotiana tabacum</i> L.   | Tobac                       | leaf                             | Nicotine                                      | Banned                 |
| <i>Papaver</i> spp.<br>(all species) containing morphine &<br>derivatives and codeine | Opium<br>poppy              | Whole plant                      | Morphine and derivatives, codeine             | Banned                 |
| <i>Pilocarpus microphyllus</i><br>Stapf ex Wardleworth                                | Jaborandi                   | Bark                             | Pilocarpine                                   | Banned                 |
| <i>Pilocarpus jaborandi</i> Holmes  |                             |                                  |   |                        |
| <i>Pilocarpus pennatifolius</i><br>Lem.   | Kava Kava                   | Whole plant                      | Pyrones, ethanol extract                      | Banned                 |
| <i>Piper methysticum</i> G.Forst.   |                             |                                  |   |                        |
| <i>Podophyllum emodi</i> Wall. ex Hook.f.<br>& Thomson                                | American mayapple, Mandrake | Roots, leaves                    | Podophyllin resin                             | Banned                 |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos   | Common name(s)          | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in<br>TM |
|--|-------------------------|----------------------------------|---|---------------------|
| <i>Podophyllum peltatum</i> L.   |                         |                                  |   |                     |
| <i>Psilocybe cubensis</i> (Earle) Singer   | Boomers, Gold caps      | Whole plant                      | Psilocybine, Psilocin                         | Banned              |
| <i>Schoenocaulon officinale</i> (Schltdl. & Cham.) A.Gray  | Sabadilla               | Seed                             | Veratrine                                     | Banned              |
| <i>Scilla sinensis</i> (Lour.) Merr.   | -                       | Bulb                             | Cardiac glycoside                             | Banned              |
| <i>Senecio aureus</i> L.<br><i>Senecio jacobaea</i> L.<br><i>Senecio bicolor</i> Sch.Bip.<br><i>Senecio nemorensis</i> L.<br><i>Senecio vulgaris</i> L.<br><i>Senecio longilobus</i> Benth.<br><i>Senecio scandens</i> Buch.-Ham. ex D.Don | -                       | whole plant                      | pyrrolizidine alkaloids                       | Banned              |
| <i>Solanum dulcamara</i> L.<br><i>Solanum americanum</i> Mill.   | Bittersweet, Nightshade | Leaf, flowering tops             | Solanaceous alkaloids                         | Banned              |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)  | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class  | Ban Status in<br>TM |
|---|---|----------------------------------|--|---------------------|
| <i>Syn. Solanum nigrum L.</i>   |   |                                  |  |                     |
| <i>Spigelia marilandica L.</i>  | Worm grass, Pinkroot  | Whole plant                      | Spigeline (a strychnine-like alkaloid)   | Banned              |
| <i>Strophanthus</i> spp. (all species)<br>containing strophanthus alkaloids   | Kombe   | Whole plant                      | Strophanthus<br>Alkaloids  | Banned              |
| <i>Veratrum viride</i> Aiton<br><i>Veratrum album</i> L.<br><i>Veratrum mengtzeanum</i> O.Loes.<br><i>Veratrum nigrum</i> L.<br><i>Veratrum stenophyllum</i> Diels<br><i>Veratrum maackii</i> Regel<br><i>Veratrum dahuricum</i> (Turcz.) O.Loes.<br><i>Veratrum grandiflorum</i> (Maxim. ex<br>Miq.) O.Loes.<br><i>Veratrum taliense</i> O.Loes. | American Hellebore, Indian<br>Poke, Indian Hellebore, False<br>Hellebore, Green False<br>Hellebore, White Hellebore | Whole Plant                      | Veratrum alkaloids including<br>veratramine, cyclopamine,<br>cycloposine, jervine, and muldamine | Banned              |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos | Common name(s)     | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in<br>TM |
|--------------------------|--------------------|----------------------------------|---|---------------------|
| <i>Vinca minor</i> L.    | Periwinkle, Myrtle | Whole plant                      | Indole alkaloids: Vincamine, eburnamenine     | Banned              |

[Information on the reasons and supporting references is available as a [compendium of the negative list](#).]

## Appendix 2 NEGATIVE LIST OF SUBSTANCES FOR HEALTH SUPPLEMENTS

This list is adopted at the 19th ACCSQ Traditional Medicines and Health Supplements Scientific Committee Meeting on 24-27 June 2013, Bagan, Myanmar and endorsed at the 19th ACCSQ Traditional Medicines and Health Supplements Product Working Group Meeting on 28-29 June 2013, Bagan, Myanmar.

| Scientific Name & Photos    | Common name(s)  | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class                       | Ban Status in HS |
|-----------------------------|---|----------------------------------|---|------------------|
| <i>Abrus precatorius</i> L. | Indian Licorice, Precatory bean, Jequerity, Mutual love Bean (China), Kudri Mani (Tamil), Guru Ginja (Telegu) | Seed                             | Abrin, which consists of abrus agglutinin, and toxic lectins abrins | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)  | Harmful Animal/<br>Plant Part(s)   | Name of Harmful Compound or<br>Compound Class  | Ban Status in HS |
|---|---|--|--|------------------|
| <b><i>Aconitum spp.</i></b><br>(all species) containing aconite alkaloids | Monkshood, Aconite  | Whole plant  | Aconite alkaloids  | Banned           |
| <b><i>Adonis vernalis L.</i></b>  | Pheasant's eye  | Whole plant  | Adonitoxin   | Banned           |
| <b>Animals parts containing hormones</b><br>(all species)                 | -   | Parts that may contain hormones: Pituitary gland, Thyroid gland, Parathyroid glands, Adrenal glands, Pancreas, Thymus gland, Ovary, Testes, Placenta | Growth hormone, prolactin, adrenocortico-tropic hormone, Thyroid-stimulating hormone, Follicle-stimulating hormone, luteinizing hormone, oxytocin, antidiuretic hormone, thyroid hormone, calcitonin, parathyroid hormone, mineralocorti-coids, glucocorti-coids, sex hormones, insulin, glucagon, thymosin, estrogens, progesterone, testosterone | Banned           |
| <b><i>Antiaris toxicaria</i> Lesch.</b>                                   | Upas tree (Javanese Language-arrow poison), Bark cloth Tree | Latex, Sap   | Cardiac glycoside (antiarin), Cardenolides & Alkaloids (with cardiac arresting potential)  | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)   | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in HS |
|---|--|----------------------------------|---|------------------|
| <i>Aristolochia</i> spp. (all species) containing aristolochic acid                         | Birthwort, Pelican flower, Sangree root, Sangrel, Serpentaria, Snakeroot, Snakeweed  | Whole plant                      | Aristolochic acid                             | Banned           |
| <i>Artemisia</i> spp. (all species) containing artemisinin                                  | Wormwood   | Leaf                             | Artemisinin                                   | Banned           |
| <i>Aspidosperma quebracho-blanco</i> Schiltl.   | Quebracho  | Bark                             | Aspido-spermine                               | Banned           |
| <i>Atropa belladonna</i> L.   | Deadly Nightshade  | Whole plant                      | Scopolamine; Hyoscyamine; Atropine            | Banned           |
| <i>Azadirachta indica</i> A.Juss.   | Nimba, Neem  | Seeds                            | Azadirachtin and derivatives                  | Banned           |
| <i>Berberis</i> spp. (all species) containing berberine<br>e.g. <i>Berberis vulgaris</i> L. | Mahonia Aquifolium: Oregon Grape , Mountain Grape, Barberry. Mahonia Repens: Creeping Barberry, Creeping Mahonia, Creeping Oregon-Grape Mahonia Nervosa: Dwarf Oregon-grape, Cascade Oregon-grape, Dull Oregon-grape | Root, bark, rhizome              | Berberine                                     | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)                                       | Harmful Animal/<br>Plant Part(s)   | Name of Harmful Compound or<br>Compound Class                        | Ban Status in HS |
|---|--|------------------------------------|--|------------------|
| <i>Brucea javanica</i> (L.) Merr.   | Sumatrana amarissimus, Java brucea                   | Dried fruits & seed                | Bruceine, Bruceantinol and Bruceoside                                | Banned           |
| <i>Bufo gargarizans</i> Cantor<br><i>Bufo melanostictus</i> Schneider<br><i>Bufo vulgaris</i> Lour. | Toad, Samsu, kodok kerok                             | Venom, dried secretion, whole body | Cinobufagin, resibufagenin, bufagins, catecholamines: asbufothionine | Banned           |
| <i>Calotropis gigantea</i> (L.) Dryand.<br><i>Calotropis procera</i> (Aiton) Dryand.                | Crown flower, Giant milkweed                         | Latex                              | Cardiac glycosides, calotropin                                       | Banned           |
| <i>Cannabis sativa</i> L.<br><i>Cannabis indica</i> Lam.  | Marijuana  | Whole plant                        | Cannabinoids   | Banned           |
| <i>Catharanthus roseus</i> (L.) G.Don   | <i>Vinca rosea</i> , Periwinkle Madagascar, Old Maid | Whole plant                        | Vinca alkaloids  | Banned           |
| <i>Cerbera manghas</i> L.   | Dog bane, Pink eyed cerbera                          | Seed                               | Digitoxinglyco-side, Cerberine, Cerberoside, thevetin                | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos                     | Common name(s)                               | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class                      | Ban Status in HS |
|--|--|----------------------------------|--|------------------|
| <i>Cerbera odollam</i> Gaertn.               | Indian Suicide Tree,<br>Sea Mango            | Seed                             | Cerberin, cerebroside, odollin, odolotoxin, thevetin and cerapain. | Banned           |
| <i>Chelidonium majus</i> L.                  | Celandine,<br>Great Celandine,<br>Nipplewort | Dried, whole or cut aerial parts | Berberine, chelidonine, sanguinarine, coptisine, chelerythrine     | Banned           |
| <i>Chondrodendron tomentosum</i> Ruiz & Pav. | Curare                                       | Stems                            | Tubocurarine chloride  | Banned           |
| <i>Cinchona</i> spp.                         | Quine bark                                   | Bark                             | Cinchona alkaloids ex. Quinine and Derivatives                     | Banned           |
| <i>Citrullus colocynthis</i> (L.) Schrad.    | Bitter apple                                 | Seed, fructus                    | Curcubitacin   | Banned           |
| <i>Claviceps purpurea</i> (Fr.) Tul.         | Ergo   | Sclerotium                       | Ergot alkaloids (including ergotamine and ergometrine)             | Banned           |
| <i>Colchicum autumnale</i> L.                | Meadow saffron                               | Seed                             | Cochicine  | Banned           |
| <i>Conium maculatum</i> L.                   | Hemlock                                      | Whole plant                      | Coniine  | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos   | Common name(s)   | Harmful Animal/<br>Plant Part(s)                            | Name of Harmful Compound or<br>Compound Class   | Ban Status in HS              |
|--|--|---|---|-------------------------------|
|  |  |   |   |                               |
| <i>Croton tiglium</i> L.   | Croton   | Fruit, seeds and oil  | Croton oil containing:<br>Crotonic acid, tiglic acid, crotin,<br>cocarcinogen Phorbol ester | Banned                        |
| <i>Datura</i> spp.<br>(all species)<br>containing hyoscyamine,<br>atropine, scopolamine and<br>apoatropine   | Jimson weed,<br>Devil's apple, Green Dragon,<br>Zombie's Cucumber,<br>Moon Weed,<br>Trumpet Lily,<br>Stinkweed | Leaf, seed,<br>flowering or fruiting parts with<br>branches | Hyoscyamine, atropine,<br>scopolamine, apoatropine  | Banned                        |
| <i>Delphinium staphisagria</i> L.  | Stavesacre   | Seeds   | Delphinine, Staphisine  | Banned                        |
| <i>Digitalis</i> spp.<br>(all species)<br>containing glycoside   | -  | Leaf  | Cardiac glycoside   | Banned                        |
| <i>Drimia maritima</i> (L.) Stearn<br><i>Syn. Urginea maritima</i> (L.) Baker                                | Sea squill,<br>red squill,<br>sea onion, squill  | Bulb  | Cardiac glycoside   | Banned                        |
| <i>Dryobalanops sumatrensis</i> (J.F.Gmel.)<br>Kosterm.<br><i>Syn. Dryobalanops aromatica</i><br>C.F.Gaertn. | Borneo camphor, Kapur,<br>Malay Camphor,<br>Sumatra camphor  | Whole plant   | Borneol (Borneo camphor)  | Banned in oral<br>preparation |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)                           | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class   | Ban Status in HS |
|---|--|----------------------------------|---|------------------|
| <i>Dryobalanops lanceolata</i> Burck  |  |                                  |   |                  |
| <i>Dryopteris filix-mas</i> (L.) Schott   | Male Fern, aspidium,<br>Male Shield Fern | Rhizome                          | Filicin,<br>aspidinol   | Banned           |
| <i>Euphorbia antiquorum</i> L.<br><i>Euphorbia trigona</i> Mill.  | Triangular spurge                        | Latex                            | Alpha euphorbol,<br>Beta amyrin cycloartenol Euphol                                   | Banned           |
| <i>Excoecaria agallocha</i> L.  | Blinding tree                            | Latex                            | Excoecaria phorbol  | Banned           |
| <i>Fritillaria</i> spp.   | Fritillary bulb                          | Dried bulb                       | Alkaloid: chinpeimine, fritimine,<br>beilupeimine hashimirine<br>peimine<br>peimisine | Banned           |
| <i>Garcinia elliptica</i> Wall. ex Wight<br><i>Garcinia hanburyi</i> Hook.f.<br><i>Garcinia morella</i> (Gaertn.) Desr. | Gamboge                                  | Gum resin                        | Cambogic acid,<br>β-guttiferin,<br>α-1-guttiferin                                     | Banned           |
| <i>Gelsemium sempervirens</i> (L.) J.St.-Hil.   | Palaung Thay                             | Root, leaves and rhizomes        | Gelsemine &<br>Gelseminine (Gelsemium indole)   | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)   | Harmful Animal/<br>Plant Part(s)            | Name of Harmful Compound or<br>Compound Class  | Ban Status in HS |
|---|--|---|--|------------------|
| <i>Gelsemium elegans</i> (Gardner & Chapm.) Benth.                              |  |   | alkaloid)  |                  |
| <i>Gluta usitata</i> (Wall.) Ding Hou<br>Syn. <i>Melanorrhoea usitata</i> Wall. | Vanish tree  | Latex                                       | Urushic acid, Urushiol, Cardanol, Cardol, Anacardic acid   | Banned           |
| <i>Hyoscyamus muticus</i> L.<br><i>Hyoscyamus niger</i> L.                      | Henbane, Henblain, Jusquaime                                       | Whole plant                                 | Hyoscyamine, atropine, hyoscine  | Banned           |
| <i>Jatropha multifida</i> L.  | Coral Bush,<br>Coral Plant,<br>Physic nut,<br>Guatemala<br>rhubarb | Fruits/Seeds                                | Phytotoxin (Toxalbumin<br>- Curcin)  | Banned           |
| <i>Juniperus sabina</i> L.  | Savin,<br>Savine   | Extracted Essential oil<br>(i.e. Savin Oil) | Sabinyl acetate,<br>sabinene, podophyllo-toxin and<br>others   | Banned           |
| <i>Lantana camara</i> L.  | Tembelekan<br>(tahi ayam)  | Whole plant                                 | Lantadene 2,2% from dry leave<br>and stem Lancamaron   | Banned           |
| <i>Larrea tridentata</i> (Sessé & Moc. ex DC.) Coville                          | Chaparral  | Whole plant                                 | Main harmful compounds in<br>chaparral are Lignans, in which<br>nordihydro-guaiaretic acid<br>(NDGA) | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos   | Common name(s)  | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class   | Ban Status in HS |
|--|---|----------------------------------|---|------------------|
| <i>Larrea mexicana</i> Moric.  |   |                                  | is the major compound   |                  |
| <i>Lobelia nicotianifolia</i> Roth ex Schult.<br><i>Lobelia inflata</i> L.<br><i>Lobelia chinensis</i> Lour.<br><i>Lobelia tupa</i> L. | Indian tobacco  | Whole plant                      | Lobeline  | Banned           |
| <i>Lytta vesicatoria</i> Linn.   | Spanish flies   | Whole body, tinktur              | Cantharidin   | Banned           |
| <i>Magnolia officinalis</i> Rehder & E.H.Wilson  | Houpo,<br>Houpoqua,<br>Lamp post,<br>Officinal magnolia | Whole plant                      | Bark:level of magnolol 2-11%,<br>honokiol 0.3-4.6%,eudes mol <1%,<br>< 200mg of bark/dosage<br>form has to be<br>from a Chinese<br>formulation<br>and contraindicated in<br>pregnancy<br>(emmema-gogue) | Banned           |
| <i>Melaleuca alternifolia</i> (Maiden & Betche) Cheel  | Tea tree oil (TTO)                                      | Tea tree oil                     | Tea tree oil  | Banned           |
| <i>Mitragyna speciosa</i> (Korth.) Havil.  | Kratom  | Whole plant                      | Mitragynine indole, alkaloid  | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)              | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in HS |
|---|-----------------------------|----------------------------------|---|------------------|
| <i>Mucuna pruriens</i> (L.) DC.   | Cowhage, Cowage             | Seed                             | Dopamine, Nicotine,<br>Physostigmine          | Banned           |
| <i>Mylabris phalerata</i> Pall.<br><i>Mylabris cichorii</i> Linnaeus                  | Blister beetle, Mylabris    | Dried body                       | Cantharidin                                   | Banned           |
| <i>Nerium oleander</i> L.<br>Syn. <i>Nerium indicum</i> Mill.                         | Indian oleander, Exile Tree | Whole plant                      | Neriin  | Banned           |
| <i>Nicotiana tabacum</i> L.   | Tobac                       | Leaf                             | Nicotine                                      | Banned           |
| <i>Papaver</i> spp.<br>(all species) containing morphine &<br>derivatives and codeine | Opium poppy                 | Whole plant                      | Morphine and<br>derivatives,<br>codeine       | Banned           |
| <i>Pausinystalia johimbe</i> (K.Schum.) Pierre<br>ex Beille                           | Yohimbe                     | Bark                             | Yohimbine                                     | Banned           |
| <i>Physostigma venenosum</i> Balf.  | Calabar bean                | Seed, bean                       | Physostigmine                                 | Banned           |
| <i>Pilocarpus microphyllus</i> Stapf ex   | Jaborandi                   | Bark                             | Pilocarpine                                   | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos   | Common name(s)                 | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in HS |
|--|--------------------------------|----------------------------------|---|------------------|
| <i>Wardleworth</i><br><i>Pilocarpus jaborandi</i> Holmes<br><i>Pilocarpus pinnatifolius</i> Lem. |                                |                                  |   |                  |
| <i>Piper methysticum</i> G.Forst.  | Kava Kava                      | Whole plant                      | Pyrones, ethanol extract                      | Banned           |
| <i>Plumbago zeylanica</i> L.   | White leadwort                 | Roots                            | Plumbagin                                     | Banned           |
| <i>Plumbago indica</i> L.  | Rose-coloured leadwort         | Root, root bark                  | Plumbagin                                     | Banned           |
| <i>Podophyllum emodii</i> Wall. ex Hook.f. & Thomson<br><i>Podophyllum peltatum</i> L.           | American mayapple,<br>Mandrake | Roots, leaves                    | Podophyllin resin                             | Banned           |
| <i>Psilocybe cubensis</i> (Earle) Singer   | Boomers, Gold caps             | Whole plant                      | Psilocybine, Psilocin                         | Banned           |
| <i>Punica granatum</i> L.  | Pomegranate                    | Stem bark and root bark          | Pomegranate alkaloids                         | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)                            | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class                    | Ban Status in HS |
|---|---|----------------------------------|--|------------------|
| <i>Rauvolfia serpentina</i> (L.)<br>Benth. ex Kurz<br><br>Syn. <i>Ophioxylon serpentinum</i> L.   | Rauwolfia, Indian snakeroot,<br>Snakeroot | Root, whole plant                | Reserpine, Rescinnamine,<br>ajmalane                             | Banned           |
| <i>Rauvolfia vomitoria</i> Afzel.   |   |                                  |  |                  |
| <i>Sanguinaria canadensis</i> L.  | Bloodroot, Indian Paint                   | Rhizomes and roots               | Sanguinarine, chelerethrin,<br>sanguirulin, berberine, protopine | Banned           |
| <i>Schoenocaulon officinale</i> (Schltdl. &<br>Cham.) A.Gray  | Sabadilla                                 | Seed                             | Veratrine  | Banned           |
| <i>Scilla sinensis</i> (Lour.) Merr.  | -   | Bulb                             | Cardiac glycoside  | Banned           |
| <i>Senecio aureus</i> L.<br><i>Senecio jacobaea</i> L.<br><i>Senecio bicolor</i> Sch.Bip.<br><i>Senecio nemorensis</i> L.<br><i>Senecio vulgaris</i> L.<br><i>Senecio longilobus</i> Benth. | -   | Whole plant                      | Pyrrolizidine alkaloids  | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)  | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in HS |
|---|---|----------------------------------|---|------------------|
| <i>Senecio scandens</i> Buch.-Ham. ex D.Don   |   |                                  |   |                  |
| <i>Solanum dulcamara</i> L.<br><i>Solanum americanum</i> Mill.<br>Syn. <i>Solanum nigrum</i> L. | Bittersweet,<br>Nightshade                              | Leaf, flowering tops             | Solanaceous alkaloids                         | Banned           |
| <i>Sophora tomentosa</i> L.   | Sea coast Laburnum, Silver Bush                         | Seed                             | Alkaloids -<br>matrine,<br>cytisine           | Banned           |
| <i>Spigelia marilandica</i> L.  | Worm grass, Pinkroot                                    | Whole plant                      | Spigeline (a strychnine-like<br>alkaloid)     | Banned           |
| <i>Stephania tetrandra</i> S.Moore  | Fang ji<br>Fen fang ji<br>Han fang ji<br>Stephania-root | Whole plant                      | Aristolochic acid                             | Banned           |
| <i>Strophanthus</i> spp.<br>(all species)<br>containing strophanthus alkaloids                  | Kombe   | Whole plant                      | Strophanthus<br>alkaloids                     | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)   | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class  | Ban Status in HS |
|---|--|----------------------------------|--|------------------|
| <i>Strychnos nux-vomica</i> L.<br><i>Strychnos ignatii</i> P.J. Bergius<br><i>Strychnos lucida</i> R.Br.<br><i>Strychnos roborans</i> A.W.Hill  | Nux-vomica   | Seed                             | Strychnine   | Banned           |
| <i>Symphytum officinale</i> L.<br><i>Symphytum asperum</i> Lepech.<br><i>Symphytum × uplandicum</i> Nyman<br><i>Symphytum peregrinum</i> Ledeb.   | Comfrey  | Whole plant                      | Pyrrolizidine alkaloids  | Banned           |
| <i>Veratrum viride</i> Aiton<br><i>Veratrum album</i> L.<br><i>Veratrum mengtzeanum</i> O.Loes.<br><i>Veratrum nigrum</i> L.<br><i>Veratrum stenophyllum</i> Diels<br><i>Veratrum maackii</i> Regel | American Hellebore, Indian Poke, Indian Hellebore, False Hellebore, Green False Hellebore, White Hellebore | Whole Plant                      | Veratrum alkaloids including veratramine, cyclopamine, cycloposine, jervine, and muldamine | Banned           |



## ASEAN Guiding Principles for Inclusion into or Exclusion from the Negative List of Substances for Traditional Medicines and Health Supplements

| Scientific Name & Photos  | Common name(s)     | Harmful Animal/<br>Plant Part(s) | Name of Harmful Compound or<br>Compound Class | Ban Status in HS |
|---|--------------------|----------------------------------|---|------------------|
| <i>Veratrum dahuricum</i> (Turcz.) O.Loes.<br><i>Veratrum grandiflorum</i> (Maxim. ex Miq.) O.Loes.<br><i>Veratrum taliense</i> O.Loes. |                    |                                  |   |                  |
| <i>Vinca minor</i> L.   | Periwinkle, Myrtle | Whole plant                      | Indole alkaloids: Vincamine, eburnamenine     | Banned           |

[Information on the reasons and supporting references is available as a compendium of the negative list.]