## MBG Ethnobotany Plant Use and Sub-Use Categories

### 1. Food - Human

- 1.1. **Beverages** (alcoholic and non-alcoholic, stimulants, calmatives, juices, non-medicinal teas, etc.)
- 1.2. **Condiments, herbs, spices** (relishes, sauces, salsas, chutneys, garnishes, pepper, seasonings, etc.)
- 1.3. **Vegetables & Fruits** (pickles, salads, jams and jellies, dessert fruits, etc.)
- 1.4. **Legumes, pulses** (lentils, soybeans, peas, chickpeas, peanuts, beans, dals, etc.)
- 1.5. Grains, rice (oatmeal, cereals, breads, cakes, rice, quinoa, barley, etc.)
- 1.6. **Root and tuber carbohydrates** (potatoes, yams, cassava, taro root, cocoyam, achira, etc.)
- 1.7. **Nuts** (acorns, almonds, candlenuts, cashews, chestnuts, hazelnuts, macadamia nuts, pecans, pine nuts, pistachios, walnuts, seeds consumed as nuts, etc.)
- 1.8. **Oils, Gums** (olive oil, canola oil, corn oil, cottonseed oil, sesame oil, other cooking oil, gum arabic, carrageenan, cellulose, guar gum, locust bean gum, pectin, etc.)
- 1.9. **Additives** (clarifier, colorant, emulsifier, extender/thickener, fermenting agent, flavoring preservative, sweetener, tenderizer, vinegar, etc.)
- 1.10. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

### 2. Food - Animal

- 2.1. **Fodder/forage.graze.silage** (hay, straw, grasses, grain, root crops, kale and rape, etc.)
- 2.2. **Browse** (buds, leaves, and twigs of woody species consumed as food, etc.)
- 2.3. **Invertebrate food & bee plants** (any plants consumed by invertebrates that are used by humans bees (pollen/nectar sources), silkworms, lac bugs, dye insects, caterpillars, larvae and butterfly plants, etc.)

- 2.4. **Fruits** (any fruit consumed by animals for food)
- 2.5. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

## 3. Medicines - Human and Veterinary

- 3.1. **Blood and Circulatory System** (anemia, aorta, blood, blood clothing, blood pressure, blood vessels, bone marrow, brain circulation, capillaries, chest pain, gangrene, heart, heart attack, heart beat, heart disease, heart valves, hemorrhages, lung circulation, plasma, platelets, red blood cells, sickle cell anemia, spleen, veins, white blood cells, etc.)
- 3.2. **Dental** (cavities, gums, lips, mouth, saliva, salivary glands, teeth, teething, tongue, tooth cleansing, etc.)
- 3.3. **Digestive System** (abdomen, anal fissures, annus, appendicitis, appendix, bile duct, bloating, colitis, colon, constipation, diarrhea, digestion, duodenum, gall balder, gallstones, gas, gastroenteritis, heartburn, hemorrhoids, hepatitis, indigestion, intestines, irritable bowel syndrome, laxative, liver, motion sickness, nausea, esophagus, pancreas, rectum, stomach, stomach ulcers, vomiting, etc.)
- 3.4. **Endocrine System** (Hormones) (adrenal gland, diabetes, dwarfism, goiter, growth, hypothalamus, pancreas islet cells, parathyroid, pineal gland, pituitary gland, thymus, thyroid gland, etc.)
- 3.5. **Female and Male Reproduction** (abortion/miscarriage, abotifacient, aphrodesiacs, birth control, breasts, cervix, clitoris, contraceptive, aocrpus luteum, eggs, epididymis, fertility, Fallopian tubes, female contraception, foreskin, genital tract, hymen, impotence, infertility, labia, labor & birth, lactation, libido,male contraception, menopause, menstruation, morning sickness, nipples, ovaries, oviduct, ovulation, penis, placenta, PMS, ptregnancey, prostate, puberty, scrotum, semen, sperm, spermicide, vas deferens, veneral diseases, vagina, vulva, "women's diseases", etc.)
- 3.6. **Urinary System** (bladder, incontinence, kidney cells, kidneys, kidney stones, ureter, urethra, urinary tract, urination, urine, etc.)

- 3.7. **Immune System** (lymph, lymph glands, lymph nodes, lymph vessels, lymphocytes, etc.)
- 3.8. **Metabolic System/Fevers/Nutrition** (amino acid metabolism, antioxidants, appetite, blood sugar, body temperature regulation, calcium metabolism, carbohydrate metabolism, chills, cholesterol, dehydration, energy metabolism, fat metabolism, fluid, electrolyte & acid balance, gout, iodine deficiency, malnutrition, mineral deficiencies, mineral metabolism, obesity, sweating, vitamin deficiencies, etc.)
- 3.9. **Muscular-skeletal System** (ankles, arms, arthritis, back, bones, bone fractures, cartilage, chest, connective tissue, dislocations, elbows, face, fat tissue, feet, fingers, fractures, frostbite, hands, head, hips, jaws, joint, knees, legs, ligaments, muscle ache, muscle spasms, muscle cramps, muscles, muscle relaxants, muscle stimulant, neck, ribs, shoulders, skull, smooth muscles, spine, sprain, straint, tendons, thighs, toes, vertebrae, wrists, etc.)
- 3.10. **Nervous System & Mental Health** (alcoholism, Alzheimer's disease, anxiety, anorexia nervosa, antidepressants, autonomic nervous system, brain, brain damage, brain stem, brain ventricles, bulimia, central nervous system, cerebrum, coma, confusion, convulsions, cranial nerves, delirium, delusions, dementia, depression, dizziness, drug addiction, facial nerves, fainting, ganglia, headache, insanity, insomnia, mental health, memory loss, migraines, motor nerves, neurotransmitters, nightmares, parasympathetic nervous system, peripheral nervous system, sensory nerves, sleep, spinal cord, stroke, sympathetic nervous system, tremors, etc.)
- 3.11. **Respiratory System** (asthma, breathing, bronchioles, congestion, coughing, diaphragm, emphysema, hay fever, hiccups, larynx, lungs, nasal tract, nose, pharynx, pneumonia, respiratory mucosa, shortness of breath, snoring, thorax, throat, tonsils, trachea, wheezing, etc.)
- 3.12. **Sensory System** (blindness, blurry vision, cataracts, color blindness, corneas, deafness, eardrums, ears, ear wax, eyelids, eyes, eye

movements, glaucoma, hearing, hearing loss, pupils, retinas, smell, taste, tears, touch, vision, etc.)

- 3.13. **Skin and Related Tissue** (acne, beard, blisters, boils, bruises, burns, calluses, dermatitis, dandruff, eczema, eyebrows, fur, hair, hair follicles, hair loss, hives, hooves, itching, nails, rashes, scalp, skin, sores, sunburn, sunscreen, sweat glands, etc.)
- 3.14. **Infections, parasites, fungus** (AIDS, antibacterial, antifungal, antimicrobial, antiseptic, antiviral, bacterial infections, chicken pox, colds, cold sores, disinfectants, dysentery, fleas, flukes, food poisoning, fungal infections, hookworm, influenza, lice, malaria, rabies, ringworm, scabies, tapeworm, viral infections, etc.)
- 3.15. **Poisons/antidotes, allergens** (allergens (such as poison ivy), antidotes for bites and insect stings; and anything causing death, mutagenic, teratogenic effects, etc.)
- 3.16. **Veterinary medicine & Zoopharmacognosy** (plants used to treat animals, and plants that animals self-administer as medicine, etc.)
- 3.17. **Non-Western medicinal systems** ("humors", heating and cooling the body, body essences, cold, dampness, heat, wind, etc.)
- 3.18. **Belief Systems** (bewitchment, evil eye, sacred diseases, spells, susto, etc.)
- 3.19. General, nonspecific symptoms (includes "tonics" and "wound healers" (both internal and external wounds), generalized allergic reactions, general and local anesthetics, general pain and pain relievers, medicines against fatigue, dizziness & fainting, malaise, aches (including headaches) of unspecified origin, fevers, swelling, weakness, etc.)
- 3.20. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

### 4. Chemicals

- 4.1. **Latex, rubber** (guayule latex, chicle, gutta-percha, etc..)
- 4.2. **Reisins, non-edible gums** (mucilages, turpentine, rosin itch, pectin, wood creosote, amber, sterculia gum, gum ghatti, kino gu, etc)

- 4.3. **Oils (non-edible), waxes, soaps** (essential oils, tung oil, oiticica oil, tall oil, hydrogels, carnauba wax, candelilla wax, jojoba wax, sugar cane wax, bayberry, saponins, etc..)
- 4.4. **Dyes, paints** (linseed oil, soy-based ink, dammar resin, henna, indigo blue, annatto, madder root larkspur, etc.)
- 4.5. **Tannins, flavonoids, other polyphenols** (Tannin, anthocyanins, flavonols, glucosides, isoflavones, etc..)
- 4.6. **Aromatics/perfumes** (Frankincense, myrrh, incense (non-religious use), perfume, etc.)
- 4.7. **Solvents** (wood alcohols, tall oil derivatives, etc.)
- 4.8. Adhesives (Tall Oil derivatives, gum acacia, gum tragacanth, etc..)
- 4.9. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

## 5. Fuels

- 5.1. **Firewood, charcoal** (logs, kindling, leaves, roots, charcoal, etc..)
- 5.2. **Oil, alcohol, resins, wax** (non-edible oils, wood alcohols, saps, etc..)
- 5.3. **Firestarters** (anything used specifically to start fires tinder, etc..)
- 5.4. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

### 6. Fibers

- 6.1. **Cloth, thread, clothing, apparel** (Cloth, sacking, clothes, hats, helmets, sandals, scarves, shoes, slippers, raingear, etc..)
- 6.2. **Paper** (paper, paper substitutes, cardboard, etc..)
- 6.3. Baskets/viber containers/fiber household goods/fiber handicrafts (basketry, bags, blankets, carpets/rugs, curtains, cushions, pillows, wall hanging, placemats, coasters, hammocks, mattresses, etc..)
- 6.4. **Rope/netting/string** (rope, cord, string, twine, yarn, etc.)
- 6.5. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)
- 7. Cultural Uses

- 7.1. **Handicrafts (non-fiber)** (wood carvings, plates, bowls, picture frames, pottery, wreaths, etc..)
- 7.2. **Recreational/games/sports/toys** (fishing equipment, hunting equipment, balls, sport bats, racquets & sticks, skis & snowshoes, board games, dice, dolls, puzzles, etc.)
- 7.3. **Religious** (ritual plants (including religious incense), sacred plants, magic/mysticism, rosaries, etc.)
- 7.4. Accessories, jewelry, cosmetics (beads, belts, hair oil, hair dye, hair conditioner, skin lotions/creams, skin lighteners/darkeners, tattoos, lipsticks, body paints, body deodorants, hair combs & brushes, bracelets, earrings, necklaces, shaving equipment, tooth cleaners, etc.)
- 7.5. **Musical Instruments, art** (flutes, pipes, drums, lutes, guitars, violins, harps, sculptures, mobiles, totem poles, etc.)
- 7.6. **Psychoactive drugs** (hallucinogenic mushrooms, intoxicants, narcotics, snuff, smoking materials, etc.)
- 7.7. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

# 8. Construction/structural material

- 8.1. **Timber** (beams, columsm, planks, wooden poles, stakes, wood boards, wood chips, etc.)
- 8.2. **Furniture** (beds, bed frames, cabinets, chairs, couches, stools, tables, wardrobes, etc.)
- 8.3. **Building Material** (palm flooring, parquet, thatch, vines for binding timbers, etc.. )
- 8.4. **Tools, utensils** (non-fiber household goods, farming tools, bobbins, spools, carpentry tools, mortars & pestles, graters, hammers, mallets, ladders, needles, rakes, shovels, tool handles, chopsticks, forks, knives, spoons, spatulas, whisks, weapons, etc..)
- 8.5. **Transportation** ( boats, canoes, oars, paddles, carts, gliders, rafts, trailers, wagons, wheels, etc..)

8.6. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

## 9. Environmental

- 9.1. **Barriers/boundaries** (firebreaks, living fences, living stakes, hedges, tree-lines, shade/shelter, etc.)
- 9.2. **Erosion Control** (ground covers, revegetation, windbreaks, water retention, etc.)
- 9.3. **Fertilizers, soil improvement** (mulches, nitrogen fixers, soil structure improvement, soil quality improvement, etc...)
- 9.4. **Ornamentals** (floriculture, landscape horticulture, landscaping, lawns, private gardens, botanic gardens, parks, sport turfs, etc..)
- 9.5. **Pollution Control** (wastewater purifiers, air pollution reducers, sewage treatment, etc..)
- 9.6. Pest & weed control (insect repellant, insecticide, weed control (herbicide), plant disease control, plant pest control, vermin control, household pest control, timber protection, human or animal disease vector control, etc..)
- 9.7. **Other/NA** (When selecting this subcategory, you will be required to enter usage information in the notes category.)

### 10. Other

- 10.1. **Research** (plants used in or as the subject of any kind of research)
- 10.2. **Genetic Resources** (wild relatives of major crops which have qualities such as disease resistance, cold tolerance, drought resistance, high yield, etc.. that could be of value in breeding programs)
- 10.3. Agroforestry (alley crops (crops grown in between rows of trees), intercrops, nursery crops, insect-repelling plants, grown in crop fields, etc..
  When selecting this subcategory, you should also enter the use of the crop (e.g. edible, timber, etc..))
- 10.4. **Other** (When selecting this subcategory, you will be required to enter usage information in the notes category.)