

September 25, 2015

Express Mail

Rebecca Johnson, Ph.D.
President
Allergy Laboratories, Inc.
1005 SW 2nd Street
Oklahoma City, Oklahoma 73109

Dear Dr. Johnson:

Through routine monitoring and surveillance, the Office of Compliance and Biologics Quality in the Center for Biologics Evaluation and Research of the United States Food and Drug Administration (FDA) has reviewed your website www.allergylabs.com as well as other information in our records concerning licensed non-standardized allergenic extracts used in the diagnosis and treatment of allergic disease. It has come to our attention that correct and consistent nomenclature is not being used, and that the proportions of non-standardized extracts used in licensed allergen mixtures are not identified. The Federal Food, Drug, and Cosmetic Act provides that a drug, including an allergenic extract, shall be deemed to be misbranded if its labeling is false or misleading in any particular (Section 502(a) Federal Food, Drug, and Cosmetic Act) [21 U.S.C. 352 (a)]. Such a product may also be misbranded if the contents are not described with adequate specificity, as required under regulation (21 CFR 610.14, 610.61, 680.1(b)) and statute [21 U.S.C. 352(c), 352(e)(1)(A)(ii)].

The use of incorrect nomenclature, or multiple descriptors for allergenic extracts derived from the same source material, can lead to mistakes in diagnosis and inappropriate treatment of allergies. For example, an adverse reaction could result if two allergenic extracts identified using inconsistent nomenclature actually contain the same allergen and are administered to the same individual. In addition, the inaccurate identification of the proportions of non-standardized extracts used to make licensed allergen mixtures can lead to mistakes in the diagnosis and inappropriate treatment of allergies. Consistent use of identifying terminology and correct identification of the proportions of each non-standardized extract used to make licensed allergen mixtures are necessary to assure that allergenic extracts are accurately labeled and not misbranded.

Reviews by external panels of data related to the safety, effectiveness, and labeling for non-standardized allergenic extracts took place in 1974-1979 and 1982-1983 and support

the use of full and accurate nomenclature. The first panel's report included the proposal that specific designations and identifiers for the source materials be used and that these appear on the product label for all allergenic extracts. The second panel reviewed the findings of the first panel and further specified that genus/species names be used to identify pollen, mold and plant extracts.

FDA formed an internal committee to review available scientific and medical data from published literature on the safety and effectiveness of non-standardized allergenic extracts. During this review, FDA determined that nomenclature was not consistently applied. For example:

- Information on specific species cannot be ascertained because some products are identified using the term “mixed¹”
- Manufacturers have multiple listings in the licenses for allergenic extracts derived from the same source material
- The adoption of a different naming convention for the same source material of a specific genus and species licensed by another manufacturer
- The identity of the extract is listed by genus only, so different species may be represented across manufacturers.

This review became the basis for the nomenclature provided in this letter (see Attachments) to fully and accurately identify licensed non-standardized allergenic extracts. Technology is readily available to accurately identify the species of all source materials used for allergenic extract manufacture, so that valid nomenclature can be applied to non-standardized allergenic extracts. As described in this letter (see Attachments), FDA has provided proper identifiers for source materials that, if consistently used, would accurately identify non-standardized allergenic extracts derived from these materials.

Additionally, the identification of licensed mixtures of non-standardized allergenic extracts is ambiguous and leads to confusion and potentially inappropriate use of these extracts in the diagnosis and treatment of allergic disease. Frequently a product is identified by genus only and the species is unknown. Also, even when the component species used to manufacture the licensed allergen mixture are identified, the proportions of each non-standardized extract used to make the licensed allergen mixture are not identified. This inaccurate identification of the proportions of each non-standardized extract used in these licensed allergen mixtures also leads to confusion and potentially inappropriate treatment of allergies.

¹ Under 21 CFR 610.17, licensed biological products must not be combined with other licensed biological products “either therapeutic, prophylactic or diagnostic,” except as covered by a license obtained for the combined product. All mixes of allergenic extracts, including custom mixes, must be subject of an approved biologics license application or have in effect an investigational new drug application. FDA is addressing prescription sets of allergenic extracts in separate guidance. See Draft Guidance for Industry, Mixing, Diluting, or Repackaging Biological Products Outside the Scope of an Approved Biologics License Application. <http://www.fda.gov/ucm/groups/fdagov-public/@fdagov-drugs-gen/documents/document/ucm434176.pdf>

The nomenclature identifiers provided in this letter (see Attachments) do not necessarily constitute an exhaustive list of your products used in the diagnosis and treatment of allergic disease. It is your responsibility to ensure that the labeling for all of your licensed biological products accurately identifies the products and complies with all applicable laws, regulations, and standards.

Please review the nomenclature identifiers provided in this letter (see Attachments) and notify this office, in writing, of: (1) the steps you have taken or will take to properly identify the non-standardized allergenic extracts that are not identified, or properly identify the proportions of non-standardized extracts used to make licensed allergen mixtures, or both, based on the nomenclature provided in this letter; (2) your proposed timeframes for submitting labeling supplements under 21 CFR 601.12(f)(2)(i)(E) for product labeling that needs revision; and (3) your plans to update your establishment registration and product listing information including all currently manufactured products under Section 510 of the Act [21 U.S.C. 360]. Your response should be sent to me at the following address: U.S. Food and Drug Administration, Center for Biologics Evaluation and Research, 10903 New Hampshire Avenue, WO71-5030, Silver Spring, Maryland, 20993-0002.

In addition, please identify any non-standardized allergenic extracts that you have discontinued manufacturing and have no plans to manufacture in the future. For those non-standardized allergenic extracts that you no longer manufacture or intend to manufacture, if any, we ask you to consider submitting a voluntary request that your biologics license be revoked with regard to those extracts.

If you have questions concerning this matter, you may contact me at (240)-402-9153. Additionally, you may contact Dr. Jay Slater, Director, Division of Bacterial, Parasitic, and Allergenic Products, Office of Vaccines Research and Review at (240)-402-7396.

Sincerely,

Mary A. Malarkey
Director
Office of Compliance and Biologics Quality
Center for Biologics Evaluation and Research

Attachments:

Table 1 – Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Table 2 – Licensed non-standardized allergenic extracts with correct identifiers

cc:

Kaci Rosales

Authorizing Official

Allergy Laboratories, Inc.

1005 SW 2nd Street

Oklahoma City, Oklahoma 73109

Allergy Labs of Oklahoma. Table 1: Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Current identifier	Recommended identifier	Explanation
Animal Allergens, Camel Hair Camelus sp.	Animal Allergens: Camel hair, Camelus (species to be specified)	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Cattle Hair Bos sp	Animal Allergens: Cattle hair , Bos taurus	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Chicken Feathers Gallus sp.	Animal Allergens: Chicken feathers, Gallus gallus	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Dog Hair Canis spp.	Animal Allergens: Dog hair, Canis lupus familiaris	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Duck Feathers Anas platyrhynchos	Animal Allergens: Duck Feathers, Anas platyrhynchos	The scientific name is misspelled. The common name is correct.
Animal Allergens, Feathers, mixed (chicken, duck, goose)	Animal Allergens: Feathers, mixed (chicken, duck, goose), (species to be specified)	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Goose Feathers Chen spp.	Animal Allergens: Goose feathers, Chen (species to be specified)	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Hamster Hair Cricetus sp.	Animal Allergens: Hamster Hair, Cricetus cricetus	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Parakeet Feathers Psittacidae	Animal Allergens: Parakeet Feathers, (species to be specified)	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Pheasant Feathers Phasianidae sp.	Animal Allergens: Pheasant Feathers, (species to be specified)	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Pigeon Feathers Columba	Animal Allergens: Pigeon Feathers, Columba (species to be specified)	The scientific name is ambiguous. The common name is correct.
Animal Allergens, Poodle Hair	Animal Allergens: Poodle Hair, Canis lupus familiaris	The scientific name is absent. The common name is correct.
Animal Allergens, Silk	Animal Allergens: (common name and source material to be specified), Bombyx mori	The scientific name is absent. The common name should be revised to indicate that the source material is silk worm cocoons and not processed silk material.
Animal Allergens, Turkey Feathers Meleagris sp.	Animal Allergens: Turkey feathers, Meleagris (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Animal Products and Poultry Products, Beef Bos sp	Food - Animal Products and Poultry Products: Beef, Bos taurus	The scientific name is ambiguous. The common name is correct.
Food - Animal Products and Poultry Products, Chicken Meat Gallus sp.	Food - Animal Products and Poultry Products: Chicken Meat, Gallus gallus	The scientific name is ambiguous. The common name is correct.
Food - Animal Products and Poultry Products, Egg, White Gallus sp.	Food - Animal Products and Poultry Products: Egg, white , Gallus gallus	The scientific name is ambiguous. The common name is correct.
Food - Animal Products and Poultry Products, Egg, Whole Gallus sp.	Food - Animal Products and Poultry Products: Egg, whole , Gallus gallus	The scientific name is ambiguous. The common name is correct.
Food - Animal Products and Poultry Products, Egg, Yolk Gallus sp.	Food - Animal Products and Poultry Products: Egg, yolk , Gallus gallus	The scientific name is ambiguous. The common name is correct.
Food - Dairy Products, Casein, Cow's Milk	Food - Dairy Products: Casein, Bos taurus	The scientific name is absent. The common name is correct.
Food - Dairy Products, Lactalbumin alpha, Cow's Milk	Food - Dairy Products: Lactalbumin alpha , Bos taurus	The scientific name is absent. The common name is correct.
Food - Dairy Products, Milk, Whole Cow's	Food - Dairy Products: Milk , Bos taurus	The scientific name is absent. The common name is correct.
Food - Dairy Products, Whey, Cow's Milk	Food - Dairy Products: Whey, Bos taurus	The scientific name is absent. The common name is correct.
Food - Fish and Shellfish, Bass, Black Huro floridana	Food - Fish and Shellfish: Bass, Black, (species to be specified)	The scientific name is obsolete. The common name is presumed to be correct.
Food - Fish and Shellfish, Catfish, Bullhead Ameiurus sp.	Food - Fish and Shellfish: Catfish, Bullhead , Ameiurus, (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Fish and Shellfish, Catfish, Channel or Blue Ictalurus catus	Food - Fish and Shellfish:(common name to be specified), (species to be specified)	The scientific and common names need to be updated. The correct scientific name for Ictalurus catus is Ameiurus catus. Blue catfish and channel catfish are two different species, neither of which is Ameiurus catus.

Allergy Labs of Oklahoma. Table 1: Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Food - Fish and Shellfish, Clam Mya	Food - Fish and Shellfish: Clam, Mya (species to be specified)	The scientific name is ambiguous. The common name, Mya Clam, may be correct if Mya arenaria is the species designated.
Food - Fish and Shellfish, Clam Venus	Food - Fish and Shellfish: Clam, Venus, (species to be specified)	The scientific name is absent. The common name, Venus clam, may be correct depending on the designated species.
Food - Fish and Shellfish, Codfish Gadus callarias	Food - Fish and Shellfish: Cod, Atlantic, Gadus morhua	The scientific name is obsolete. The common name is ambiguous.
Food - Fish and Shellfish, Crab Xiphosurus sowerbyi	Food - Fish and Shellfish: Crab, Horseshoe, (genus and species to be specified)	The scientific name is obsolete. The common name is correct.
Food - Fish and Shellfish, Flounder Pleuronectes sp.	Food - Fish and Shellfish: Flounder, Pleuronectes (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Fish and Shellfish, Lobster, Florida	Food - Fish and Shellfish: Lobster, Florida, (genus and species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Fish and Shellfish, Oyster Ostrea sp.	Food - Fish and Shellfish: Oyster, Ostrea (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Fish and Shellfish, Perch, Ocean Perca spp.	Food - Fish and Shellfish: Perch, Perca (species to be specified)	The scientific name is ambiguous. The common name is incorrect, since all three Perca species are freshwater fish.
Food - Fish and Shellfish, Scallops Vola jacobaea	Food - Fish and Shellfish: Scallops, (genus and species to be specified)	The scientific name is obsolete. The common name is ambiguous.
Food - Fish and Shellfish, Shrimp Crago sp.	Food - Fish and Shellfish: Shrimp, Crangon (species to be specified)	The scientific name is misspelled and ambiguous. The common name is correct.
Food - Fish and Shellfish, Trout, Lake Salmo sp.	Food - Fish and Shellfish: Trout, Salmo (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Fish and Shellfish, Tuna Neothunnus sp.	Food - Fish and Shellfish: Tuna, Thunnus (species to be specified)	The scientific name is obsolete and ambiguous. The common name is correct.
Food - Fish and Shellfish, Tuna Thunnus sp.	Food - Fish and Shellfish: Tuna, Thunnus (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Allspice Pimenta officinalis	Food - Plant Source: Allspice, Pimenta dioica	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Almond Prunus amygdalus	Food - Plant Source: Almond, Prunus dulcis	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Apricot Prunus sp.	Food - Plant Source: Apricot, Prunus (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Banana Musa sapientum	Food - Plant Source: Banana, Musa (species to be specified)	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Basil Ocimum basilicum	Food - Plant Source: Basil, Sweet, Ocimum basilicum	The scientific name is misspelled. The common name is correct.
Food - Plant Source, Bean, Lima Phaseolus limensis	Food - Plant Source: Bean, Lima, Phaseolus lunatus	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Blackberry Rubus alleghaniensis	Food - Plant Source: Blackberry, Allegheny, Rubus allegheniensis	The scientific name is misspelled. The common name is correct.
Food - Plant Source, Blueberry Vaccinium canadense	Food - Plant Source: Blueberry, Velvetleaf, Vaccinium myrtilloides	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Boysenberry Rubus spp.	Food - Plant Source: Boysenberry, Rubus (species to be specified)	A boysenberry is a hybrid among a blackberry, red raspberry and loganberry. The scientific name is ambiguous.
Food - Plant Source, Broccoli Brassica botrytis (or oleracea var. botrytis)	Food - Plant Source: Broccoli, Brassica oleracea var. botrytis	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Brussel Sprouts Brassica gemmifera (or oleracea var. gemmifera)	Food - Plant Source: Brussel Sprouts, Brassica oleracea var. gemmifera	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Cabbage Brassica capitata (or oleracea var. capitata)	Food - Plant Source: Cabbage, Brassica oleracea var. capitata	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Cantaloupe (Muskmelon) Cucumis melo	Food - Plant Source: Cantaloupe, Cucumis melo	The scientific and common names are correct. Cantaloupe is a cultivar of muskmelon (C. melo). Cantalope is a variant spelling.

Allergy Labs of Oklahoma. Table 1: Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Food - Plant Source, Cauliflower Brassica oleracea (or oleracea var. botrytis)	Food - Plant Source: Cauliflower, Brassica oleracea var. botrytis	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Cherry Prunus sp.	Food - Plant Source: Cherry, Prunus (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Chili Pepper	Food - Plant Source: Chili Pepper, Capsicum (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Cinnamon	Food - Plant Source: Cinnamon, Cinnamomum verum	The scientific name is obsolete. The common name is correct.
Cinnamomum zeylanicum		
Food - Plant Source, Cloves Eugenia caryophyllata	Food - Plant Source: Cloves, Syzygium aromaticum	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Corn Meal	Food - Plant Source: Corn meal, Zea mays	The scientific name is absent. The common name is correct.
Food - Plant Source, Grape (Red & Green)	Food - Plant source: Grape (Red & Green), Vitis (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Grape, Concord Vitis sp. (or Vitis labrusca)	Food - Plant Source: Grape, Concord, Vitis labrusca	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Grape, White Seedless Vitis sp. (or Vitis vinifera)	Food - Plant source: Grape, White, Vitis (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Grapefruit Citrus unuvarcipa	Food - Plant Source: Grapefruit, Citrus X paradisi	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Horse Radish Rorippa armoracia	Food - Plant Source: Horseradish, Armoracia rusticana	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Lemon Citrus limon	Food - Plant Source: Lemon, Citrus X limon	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Lime Citrus aurantifolia	Food - Plant Source: Lime, Citrus X aurantifolia	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Malt Hordeum vulgare	Food - Plant Source: Malt (Barley), Hordeum vulgare	The scientific name is correct. The common name is ambiguous.
Food - Plant Source, Mustard Seed Brassica spp.	Food - Plant Source: Mustard seed, Brassica (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Nutmeg Myristica fragans	Food - Plant Source: Nutmeg, Myristica fragrans	The scientific name is misspelled. The common name is correct.
Food - Plant Source, Okra Abelmoschus esculentus	Food - Plant Source: Okra, Abelmoschus esculentus	The scientific name is misspelled. The common name is correct.
Food - Plant Source, Onion Allium spp.	Food - Plant Source: Onion, Allium cepa	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Orange Citrus sinensis	Food - Plant Source: Orange, Citrus X sinensis	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Paprika Capsicum tetragonum	Food - Plant Source: Paprika, Capsicum annuum	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Pea, Blackeye Vigna sinensis	Food - Plant Source: Pea, Blackeye, Vigna unguiculata	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Pecanarya illinoensis	Food - Plant Source: Pecan,arya illinoensis	The scientific name is misspelled. The common name is correct.
Food - Plant Source, Pepper, Green Capsicum frutescens var. grossum	Food - Plant Source: Pepper, Green, Capsicum annuum	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Pepper, Red or Cayenne Capsicum frutescens var. longum	Food - Plant Source: Pepper, Red or Cayenne, Capsicum annuum	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Rice, Wild	Food - Plant Source: Rice, wild, Zizania (species to be specified)	The scientific name is ambiguous. The common name is correct.
Food - Plant Source, Rye Grain	Food - Plant Source: Rye Grain, Secale cereale	The scientific name is absent. The common name is correct.
Food - Plant Source, Spearmint Mentha spicata	Food - Plant Source: Spearmint, Mentha spicata	The scientific name is correct. The common name is misspelled.
Food - Plant Source, Strawberry Fragaria chiloensis	Food - Plant Source: Strawberry, Fragaria X ananassa	The scientific name is incorrect. The common name is correct.
Food - Plant Source, Tomato Nicotiana spp.	Food - Plant Source: Tomato, (species to be specified)	The scientific name is ambiguous and incorrect. The common name is correct.

Allergy Labs of Oklahoma. Table 1: Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Food - Plant Source, Vanilla Vanilla fragrans	Food - Plant Source: Vanilla, Vanilla planifolia	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Watermelon Citrullus vulgaris	Food - Plant Source: Watermelon, Citrullus lanatus	The scientific name is obsolete. The common name is correct.
Food - Plant Source, Wheat Bran	Food - Plant Source: Wheat Bran, Triticum aestivum	The scientific name is absent. The common name is correct.
Insects (Whole Body), Ant, Red Formica spp	Insects (Whole Body): Ant, Red, Formica (species to be specified)	The scientific name is ambiguous. The common name is correct.
Insects (Whole Body), Ant, Red Pogonomyrmex rugosa	Insects (Whole Body): Ant, Red, Pogonomyrmex rugosus	The scientific name is misspelled. The common name is correct.
Insects (Whole Body), Cockroach Australian	Insects (Whole Body): Cockroach, Australian, Periplaneta australasiae	The scientific name is misspelled. The common name is correct.
Insects (Whole Body), Cockroach Blattella orientalis	Insects (Whole Body): Cockroach, Oriental, Blattella orientalis	The scientific name is misspelled. The common name is correct.
Insects (Whole Body), Cockroach German Blattella germanica	Insects (Whole Body): , Blattella germanica	The scientific name is misspelled. The common name is correct.
Insects (Whole Body), Horse Fly Hybomitra spp	Insects (Whole Body): Horse fly, Hybomitra (species to be specified)	The scientific name is ambiguous. The common name is correct.
Insects (Whole Body), Horse Fly Tabanus spp	Insects (Whole Body): Horse fly, Tabanus (species to be specified)	The scientific name is ambiguous. The common name is correct.
Insects (Whole Body), Mayfly Ephemerida sp.	Insects (Whole Body): Mayfly, (genus and species to be specified)	The scientific name is ambiguous. The common name is correct.
Insects (Whole Body), Mosquito Aedes sp.	Insects (Whole Body): Mosquito, Aedes (species to be specified)	The scientific name is ambiguous. The common name is correct.
Insects (Whole Body), Mosquito Anopheles sp.	Insects (Whole Body): Mosquito, Anopheles (species to be specified)	The scientific name is ambiguous. The common name is correct.
Insects (Whole Body), Mosquito Culex sp.	Insects (Whole Body): Mosquito, Culex (species to be specified)	The scientific name is ambiguous. The common name is correct.
Insects (Whole Body), Moth Frenatae	Insects (Whole Body): Moth, (genus and species to be specified)	The scientific name is ambiguous. The common name is correct.
Molds, Rusts and Smuts, Alternaria tenuis (alternata)	Molds, Rusts and Smuts: Alternaria alternata	Scientific name is obsolete.
Molds, Rusts and Smuts, Barley Smut, Loose Ustilago nuda	Molds, Rusts and Smuts: (common name to be specified), Ustilago nuda	Scientific name is correct. Common name is uncertain.
Molds, Rusts and Smuts, Cephalosporium spp.	Molds, Rusts and Smuts: Cephalosporium (species to be specified)	Scientific name is ambiguous.
Molds, Rusts and Smuts, Cephalothecium roseum	Molds, Rusts and Smuts: Trichothecium roseum	Scientific name is obsolete.
Molds, Rusts and Smuts, Cladosporium fulvum	Molds, Rusts and Smuts: Passalora fulva	Scientific name is obsolete.
Molds, Rusts and Smuts, Foxtail Grass	Molds, Rusts and Smuts: (common name to be specified), Macalpinomyces neglectus	Scientific name is obsolete. Common name is uncertain.
Smut Ustilago neglecta		
Molds, Rusts and Smuts, Fusarium vasinfectum	Molds, Rusts and Smuts: Fusarium oxysporum	Scientific name is obsolete.
Molds, Rusts and Smuts, Gliocladium fimbriatum	Molds, Rusts and Smuts: Myrothecium verrucaria	Scientific name is obsolete.
Molds, Rusts and Smuts, Helminthosporium sativum	Molds, Rusts and Smuts: Bipolaris sorokiniana	Scientific name is obsolete.
Molds, Rusts and Smuts, Hormodendrum cladosporioides	Molds, Rusts and Smuts: Cladosporium cladosporioides	Scientific name is obsolete.
Molds, Rusts and Smuts, Johnson Grass	Molds, Rusts and Smuts: (common name to be specified), Sporisorium cruentum	Scientific name is obsolete. Common name is uncertain.
Smut Sphaelotheca cruenta		
Molds, Rusts and Smuts, Microsporium (lanosum) canis	Molds, Rusts and Smuts: Microsporium (species to be specified)	Scientific name is ambiguous.
Molds, Rusts and Smuts, Microsporium audouinii	Molds, Rusts and Smuts: Microsporium audouinii	Scientific name is misspelled.
Molds, Rusts and Smuts, Mycogone sp.	Molds, Rusts and Smuts: Mycogone (species to be specified)	Scientific name is ambiguous.

Allergy Labs of Oklahoma. Table 1: Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Molds, Rusts and Smuts, <i>Penicillium rubrum</i>	Molds, Rusts and Smuts: <i>Talaromyces ruber</i>	Scientific name is obsolete.
Molds, Rusts and Smuts, <i>Pullularia pullulans</i>	Molds, Rusts and Smuts: <i>Aureobasidium pullulans</i>	Scientific name is obsolete.
Molds, Rusts and Smuts, <i>Rhizopus nigricans</i>	Molds, Rusts and Smuts: <i>Rhizopus stolonifer</i>	Scientific name is obsolete.
Molds, Rusts and Smuts, <i>Rhodotorula</i> sp.	Molds, Rusts and Smuts: <i>Rhodotorula</i> (species to be specified)	Scientific name is ambiguous.
Molds, Rusts and Smuts, <i>Scopulariopsis</i> spp.	Molds, Rusts and Smuts: <i>Scopulariopsis</i> (species to be specified)	Scientific name is ambiguous.
Molds, Rusts and Smuts, <i>Sorghum Smut</i>	Molds, Rusts and Smuts: (common name to be specified), <i>Ustilago nuda</i>	Scientific name is correct. Common name is uncertain.
<i>Ustilago nuda</i>		
Molds, Rusts and Smuts, <i>Spondylocadium atrovirens</i>	Molds, Rusts and Smuts: <i>Helminthosporium solani</i>	Scientific name is obsolete.
Molds, Rusts and Smuts, <i>Sporotrichum pruinosum</i>	Molds, Rusts and Smuts: <i>Phanerodontia chrysosporium</i>	Scientific name is obsolete.
Molds, Rusts and Smuts, <i>Stachybotrys atra</i>	Molds, Rusts and Smuts: <i>Stachybotrys chartarum</i>	Scientific name is obsolete.
Molds, Rusts and Smuts, <i>Trichoderma lignorum</i>	Molds, Rusts and Smuts: <i>Trichoderma viride</i>	Scientific name is obsolete.
Molds, Rusts and Smuts, <i>Trichoderma</i> spp.	Molds, Rusts and Smuts: <i>Trichoderma</i> (species to be specified)	Scientific name is ambiguous.
Molds, Rusts and Smuts, <i>Wheat Bunt</i>	Molds, Rusts and Smuts: <i>Wheat Bunt</i> , <i>Tilletia caries</i>	Scientific name is misspelled. Common name is correct.
<i>Tilletia caries</i>		
Molds, Rusts and Smuts, <i>Wheat Smut</i> , <i>Loose Ustilago tritici</i>	Molds, Rusts and Smuts: (common name to be specified), <i>Ustilago tritici</i>	Scientific name is correct. Common name is uncertain.
Molds, Rusts and Smuts, <i>Wheat Stem Rust</i>	Molds, Rusts and Smuts: <i>Puccinia</i> (species to be specified)	Scientific name is ambiguous.
<i>Puccinia graminis tritici</i>		
Plants and Plant Parts, <i>Cottonseed</i>	Plants and Plant Parts: <i>Cottonseed</i> , <i>Gossypium</i> (species to be specified)	The scientific name is ambiguous. The common name is correct.
<i>Gossypium</i> spp.		
Plants and Plant Parts, <i>Flaxseed</i> or <i>Linseed</i>	Plants and Plant Parts: <i>Flax</i> , <i>Linum usitatissimum</i>	The scientific name is correct. The common name is ambiguous.
<i>Linum usitatissimum</i>		
Plants and Plant Parts, <i>Gum</i> , <i>Acacia</i> or <i>Arabic</i> <i>Acacia senegal</i>	Plants and Plant Parts: <i>Gum</i> , <i>Arabic</i> , <i>Acacia senegal</i>	The scientific name is correct. The common name is ambiguous.
Plants and Plant Parts, <i>Gum</i> , <i>Karaya</i> or <i>Bassora</i> <i>Cochlospermum religiosum</i>	Plants and Plant Parts: <i>Gum</i> (<i>Karaya</i> or <i>Bassora</i>), <i>Silk-cotton Tree</i> , <i>Cochlospermum religiosum</i>	The scientific name is correct. The common name is ambiguous.
Plants and Plant Parts, <i>Jute</i> <i>Corchorus</i> sp.	Plants and Plant Parts: <i>Jute</i> , <i>Corchorus</i> (species to be specified)	The scientific name is ambiguous. The common name is correct.
Plants and Plant Parts, <i>Orris Root</i> <i>Iris florentina</i>	Plants and Plant Parts: <i>Orris root</i> , <i>Iris germanica</i>	The scientific name is obsolete. The common name is correct.
Plants and Plant Parts, <i>Pyrethrum</i>	Plants and Plant Parts: <i>Pyrethrum</i> , <i>Chrysanthemum cinerariifolium</i>	The scientific name is ambiguous. The common name is correct.
<i>Chrysanthemum</i> spp.		
Pollens - Cultivated Farm Plants, <i>Barley</i>	Pollens - Cultivated Farm Plants: <i>Barley</i> , <i>Hordeum vulgare</i>	The scientific name is absent. The common name is correct.
Pollens - Cultivated Farm Plants, <i>Clover</i> , <i>Sweet Melilotus alba</i>	Pollens - Cultivated Farm Plants: <i>Clover</i> , <i>Sweet</i> , <i>Melilotus albus</i>	The scientific name is obsolete. The common name is correct.
Pollens - Cultivated Farm Plants, <i>Clover</i> , <i>Sweet Melilotus officinalis</i>	Pollens - Cultivated Farm Plants: <i>Clover</i> , <i>Yellow Sweet</i> , <i>Melilotus officinalis</i>	The scientific name is correct. The common name is correct.
Pollens - Cultivated Farm Plants, <i>Wheat</i> , <i>Cultivated Triticum sativa</i>	Pollens - Cultivated Farm Plants: <i>Wheat</i> , <i>Cultivated</i> , <i>Triticum aestivum</i>	The scientific name is obsolete. The common name is correct.
Pollens - Flowers, <i>Honeysuckle</i> <i>Lonicera</i> spp.	Pollens - Flowers: <i>Honeysuckle</i> , <i>Lonicera</i> (species to be specified)	The scientific name is ambiguous. The common name is correct.
Pollens - Flowers, <i>Marigold</i> <i>Tagetes patula</i>	Pollens - Flowers: <i>Marigold</i> , <i>Tagetes erecta</i>	The scientific name is obsolete. The common name is correct.
Pollens - Flowers, <i>Rose</i> <i>Rosa</i> spp.	Pollens - Flowers: <i>Rose</i> , <i>Rosa</i> (species to be specified)	The scientific name is ambiguous. The common name is correct.
Pollens - Flowers, <i>Sunflower</i> <i>Helianthus</i> spp.	Pollens - Flowers: <i>Sunflower</i> , <i>Helianthus</i> (species to be specified)	The scientific name is ambiguous. The common name is correct.

Allergy Labs of Oklahoma. Table 1: Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Pollens - Grasses, Bent Grass, Creeping	Pollens - Grasses: Bent Grass, Creeping, <i>Agrostis stolonifera</i>	The scientific name is obsolete. The common name is correct.
<i>Agrostis palustris</i>		
Pollens - Grasses, Brome, Hungarian, Romus inermis	Pollens - Grasses: Brome, Hungarian, <i>Bromus inermis</i>	The scientific name is misspelled. The common name is correct.
Pollens - Grasses, Chess, Southern	Pollens - Grasses: Brome, Southern Chess, <i>Bromus catharticus</i>	The scientific is absent. The common name is correct.
Pollens - Grasses, June Grass, Western, <i>Koeleria cristata</i>	Pollens - Grasses: June Grass, Western, <i>Koeleria pyramidata</i>	The scientific name is obsolete. The common name is correct.
Pollens - Grasses, Oatgrass, Tall <i>Arrhenatherum elatius</i> or <i>Avena elatior</i>	Pollens - Grasses: Oatgrass, Tall, <i>Arrhenatherum elatius</i>	The scientific name is misspelled and obsolete. The common name is correct.
Pollens - Grasses, Quack (Couch) Grass <i>Agropyron repens</i>	Pollens - Grasses: Quack (Couch) Grass, <i>Elymus repens</i>	The scientific name is obsolete. The common name is correct.
Pollens - Grasses, Saltgrass <i>Distichlis sp.</i>	Pollens - Grasses: Saltgrass, <i>Distichlis (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Grasses, Saltgrass, Inland <i>Distichlis stricta</i>	Pollens - Grasses: Saltgrass, Inland, <i>Distichlis spicata</i> ssp. <i>stricta</i>	The scientific name is obsolete. The common name is correct.
Pollens - Grasses, Sorghum, Grain	Pollens - Grasses: Sorghum, grain, Sorghum (species to be specified)	The scientific name is ambiguous. The common name is correct.
Pollens - Grasses, Sudan Grass <i>Sorghum vulgare sudanense</i>	Pollens - Grasses: Sudan Grass, <i>Sorghum X drummondii</i>	The scientific name is obsolete. The common name is correct.
Pollens - Grasses, Wheatgrass, Western <i>Agropyron smithii</i>	Pollens - Grasses: Wheatgrass, Western, <i>Pascopyrum smithii</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Alder <i>Alnus spp.</i>	Pollens - Trees: Alder, <i>Alnus (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Alder, Tag-Smooth <i>Alnus rugosa</i>	Pollens - Trees: Alder, Tag-Smooth, <i>Alnus incana</i> ssp. <i>rugosa</i> .	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Aspen, Quaking	Pollens - Trees: Aspen, Quaking, <i>Populus tremuloides</i>	The scientific is absent. The common name is correct.
Pollens - Trees, Bayberry <i>Myrica cerifera</i>	Pollens - Trees: Bayberry, <i>Morella cerifera</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Bayberry <i>Myrica spp.</i>	Pollens - Trees: Bayberry, <i>Myrica (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Beech, American <i>Fagus americana</i>	Pollens - Trees: Beech, American, <i>Fagus grandifolia</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Beefwood-Australian Pine <i>Casuarina equisetifolia</i>	Pollens - Trees: Beefwood-Australian Pine, <i>Casuarina equisetifolia</i>	The scientific name is misspelled. The common name is correct.
Pollens - Trees, Cedar, Mountain <i>Juniperus sabinoides</i>	Pollens - Trees: Cedar, Mountain, <i>Juniperus ashei</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Cottonwood, Arizona	Pollens - Trees: Cottonwood, Arizona, <i>Populus fremontii</i>	The scientific name is misspelled. The common name is correct.
Pollens - Trees, Cottonwood, Western	Pollens - Trees: Cottonwood, Western, <i>Populus deltoides</i> ssp. <i>monilifera</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Cypress, Arizona <i>Cupressus arizonica</i>	Pollens - Trees: Cypress, Arizona, <i>Callitropsis arizonica</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Elm Mix <i>Ulmus spp.</i>	Pollens - Trees: Elm Mix, <i>Ulmus (species to be specified)</i>	The scientific and common names are ambiguous.
Pollens - Trees, Elm, Slippery <i>Ulmus fulva (rubra)</i>	Pollens - Trees: Elm, Slippery, <i>Ulmus rubra</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Eucalyptus spp.	Pollens - Trees: Eucalyptus, <i>Eucalyptus (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Fir, Douglas <i>Pseudotsuga taxifolia</i>	Pollens - Trees: Fir, Douglas, <i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Hackberry <i>Celtis spp.</i>	Pollens - Trees: Hackberry, <i>Celtis (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Hickory, White <i>Carya alba</i>	Pollens - Trees: Hickory, White, <i>Carya tomentosa</i>	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Magnolia <i>Magnolia sp.</i>	Pollens - Trees: Magnolia, <i>Magnolia (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Maple <i>Acer spp.</i>	Pollens - Trees: Maple, <i>Acer (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Mesquite <i>Prosopis spp.</i>	Pollens - Trees: Mesquite, <i>Prosopis (species to be specified)</i>	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Osage Orange <i>Maclura pomifera</i>	Pollens - Trees: Osage Orange, <i>Maclura pomifera</i>	The scientific name is misspelled. The common name is correct.
Pollens - Trees, Pecan <i>Carya pecan</i>	Pollens - Trees: Pecan, <i>Carya illinoensis</i>	The scientific name is obsolete. The common name is correct.

Allergy Labs of Oklahoma. Table 1: Licensed non-standardized allergenic extracts with incorrect identifiers and recommended correct identifiers

Pollens - Trees, Pine, Austrian Pinus nigra	Pollens - Trees: Pine, Austrian, Pinus nigra	The scientific name is correct. The common name is misspelled.
Pollens - Trees, Pine, Poplar, Lombardy Populus nigra italica	Pollens - Trees: Poplar, Lombardy, Populus nigra	The scientific name is obsolete. The common name is correct.
Pollens - Trees, Privet Ligustrum spp.	Pollens - Trees: Ligustrum (species to be specified)	The scientific name is ambiguous. The common name is correct.
Pollens - Trees, Sumac, Upland Rhus capillina	Pollens - Trees: Sumac, Upland, Rhus copallinum	The scientific name is misspelled. The common name is correct.
Pollens - Trees, Sycamore, American (Eastern) Platanus occidentalis	Pollens - Trees: Sycamore, American (Eastern), Platanus occidentalis	The scientific name is misspelled. The common name is correct.
Pollens - Weeds and Garden Plants, Broomwood Gutierrezia dracunculoides	Pollens - Weeds and Garden Plants: Broomwood, Amphichyris dracunculoides	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Cocklebur Xanthium commune	Pollens - Weeds and Garden Plants: Cocklebur, Xanthium strumarium	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Cocklebur, Mixed Xanthium spp.	Pollens - Weeds and Garden Plants: Cocklebur, Xanthium (species to be specified)	The scientific name is ambiguous. The common name is correct.
Pollens - Weeds and Garden Plants, Dock Rumex spp.	Pollens - Weeds and Garden Plants: Dock, Rumex (species to be specified)	The scientific name is ambiguous. The common name is correct.
Pollens - Weeds and Garden Plants, Fireweed, Alaska Epilobium angustifolium	Pollens - Weeds and Garden Plants: Fireweed, Alaska, Chamerion angustifolium ssp. Angustifolium	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Jerusalem Oak Chenopodium botrys	Pollens - Weeds and Garden Plants: Jerusalem Oak, Dysphania botrys	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Marshelder, Burweed (Giant Poverty) Iva xanthifolia	Pollens - Weeds and Garden Plants: Marshelder, Burweed (Giant Poverty), Cyclachaena xanthifolia	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Marshelder, True (Rough) Iva ciliata	Pollens - Weeds and Garden Plants: Marshelder, True (Rough), Iva annua	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Ragweed, False Franseria acanthicarpa	Pollens - Weeds and Garden Plants: Ragweed, False, Ambrosia acanthicarpa	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Ragweed, False Franseria ambrosiodes	Pollens - Weeds and Garden Plants: Ragweed, False, Ambrosia ambrosioides	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Ragweed, Mixed Ambrosia spp.	Pollens - Weeds and Garden Plants: Ragweed, Ambrosia (species to be specified)	The scientific and common names are ambiguous.
Pollens - Weeds and Garden Plants, Ragweed, Slender Franseria tenuifolia	Pollens - Weeds and Garden Plants: Ragweed, Slender, Ambrosia tenuifolia	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Ragweed, Western Ambrosia coronopifolia	Pollens - Weeds and Garden Plants: Ragweed, Western, Ambrosia psilostachya	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Ragweed, Western Giant Ambrosia aptera	Pollens - Weeds and Garden Plants: Ragweed, Western Giant, Ambrosia trifida	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Ragweed, Woolly Franseria tomentosa	Pollens - Weeds and Garden Plants: Ragweed, Woolly, Ambrosia tomentosa	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Sage, Green Artemisia dracunculoides	Pollens - Weeds and Garden Plants: Sage, Green, Artemisia dracunculus	The scientific name is misspelled. The common name is correct.
Pollens - Weeds and Garden Plants, Sage, Prairie, Artemisia dracunculoides	Pollens - Weeds and Garden Plants: Sage, Prairie, Artemisia dracunculus	The scientific name is misspelled. The common name is correct.
Pollens - Weeds and Garden Plants, Sage, Prairie, Artemisia gnaphaloides	Pollens - Weeds and Garden Plants: Sage, Prairie, Artemisia ludoviciana ssp. ludoviciana	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Waterhemp Acrida tuberculata	Pollens - Weeds and Garden Plants: Waterhemp, Amaranthus tuberculatus	The scientific name is obsolete. The common name is correct.
Pollens - Weeds and Garden Plants, Wormwood, Biennial Artemisia biennis	Pollens - Weeds and Garden Plants: Wormwood, Biennial, Artemisia biennis	The scientific name is misspelled. The common name is correct.

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Animal Allergens: Gerbil Epithelia, *Meriones unguiculatus*

Animal Allergens: Goat Hair, *Capra hircus*

Animal Allergens: Guinea Pig Hair, *Cavia porcellus*

Animal Allergens: Hog Hair, *Sus scrofa*

Animal Allergens: Horse Hair, *Equus caballus*

Animal Allergens: Mouse Hair, *Mus musculus*

Animal Allergens: Rat Epithelia, *Rattus norvegicus*

Food - Animal Products and Poultry Products: Pork, *Sus scrofa*

Food - Animal Products and Poultry Products: Turkey meat, *Meleagris gallopavo*

Food - Fish and Shellfish: Crappie, *Pomoxis annularis*

Food - Fish and Shellfish: Haddock, *Melanogrammus aeglefinus*

Food - Fish and Shellfish: Halibut, *Hippoglossus hippoglossus*

Food - Fish and Shellfish: Lobster, *Homarus americanus*

Food - Fish and Shellfish: Lobster, American, *Homarus americanus*

Food - Fish and Shellfish: Perch, Fresh Water, *Perca flavescens*

Food - Fish and Shellfish: Salmon, *Salmo salar*

Food - Plant Source: Anise Seed, *Pimpinella anisum*

Food - Plant Source: Apple, *Malus pumila*

Food - Plant Source: Artichoke, *Cynara scolymus*

Food - Plant Source: Artichoke, Jerusalem, *Helianthus tuberosus*

Food - Plant Source: Asparagus, *Asparagus officinalis*

Food - Plant Source: Avocado, *Persea americana*

Food - Plant Source: Barley, Whole Grain, *Hordeum vulgare*

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Food - Plant Source: Bay Leaves, <i>Laurus nobilis</i>
Food - Plant Source: Bean, Navy, <i>Phaseolus vulgaris</i>
Food - Plant Source: Bean, Pinto, <i>Phaseolus vulgaris</i>
Food - Plant Source: Bean, Red Kidney, <i>Phaseolus vulgaris</i>
Food - Plant Source: Bean, String Green, <i>Phaseolus vulgaris</i>
Food - Plant Source: Beet, <i>Beta vulgaris</i>
Food - Plant Source: Buckwheat, <i>Fagopyrum esculentum</i>
Food - Plant Source: Caraway Seed, <i>Carum carvi</i>
Food - Plant Source: Carrot, <i>Daucus carota</i>
Food - Plant Source: Cashew nut, <i>Anacardium occidentale</i>
Food - Plant Source: Celery, <i>Apium graveolens</i> (or <i>Apium graveolens</i> var. <i>dulce</i>)
Food - Plant Source: Coconut, <i>Cocos nucifera</i>
Food - Plant Source: Coffee, <i>Coffea arabica</i>
Food - Plant Source: Corn, <i>Zea mays</i>
Food - Plant Source: Cranberry, <i>Vaccinium macrocarpon</i>
Food - Plant Source: Cucumber, <i>Cucumis sativus</i>
Food - Plant Source: Date, <i>Phoenix dactylifera</i>
Food - Plant Source: Dill Seed, <i>Anethum graveolens</i>
Food - Plant Source: Eggplant, <i>Solanum melongena</i>
Food - Plant Source: Fig, <i>Ficus carica</i>
Food - Plant Source: Garlic, <i>Allium sativum</i>
Food - Plant Source: Ginger, <i>Zingiber officinale</i>
Food - Plant Source: Hops, <i>Humulus lupulus</i>

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Food - Plant Source: Lettuce, <i>Lactuca sativa</i>
Food - Plant Source: Mango, <i>Mangifera indica</i>
Food - Plant Source: Mushroom, <i>Agaricus campestris</i>
Food - Plant Source: Oat, <i>Avena sativa</i>
Food - Plant Source: Olive, Green, <i>Olea europaea</i>
Food - Plant Source: Oregano, <i>Origanum vulgare</i>
Food - Plant Source: Papaya, <i>Carica papaya</i>
Food - Plant Source: Parsley, <i>Petroselinum crispum</i>
Food - Plant Source: Parsnip, <i>Pastinaca sativa</i>
Food - Plant Source: Pea, Green or English, <i>Pisum sativum</i>
Food - Plant Source: Peach, <i>Prunus persica</i>
Food - Plant Source: Peanut, <i>Arachis hypogaea</i>
Food - Plant Source: Pear, <i>Pyrus communis</i>
Food - Plant Source: Pepper, Black, <i>Piper nigrum</i>
Food - Plant Source: Pepper, Black-White, <i>Piper nigrum</i>
Food - Plant Source: Pineapple, <i>Ananas comosus</i>
Food - Plant Source: Plum, <i>Prunus domestica</i>
Food - Plant Source: Poppy Seed, <i>Papaver somniferum</i>
Food - Plant Source: Potato, Sweet, <i>Ipomoea batatas</i>
Food - Plant Source: Potato, White, <i>Solanum tuberosum</i>
Food - Plant Source: Pumpkin, <i>Cucurbita pepo</i>
Food - Plant Source: Quince, <i>Cydonia oblonga</i>

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Food - Plant Source: Radish, <i>Raphanus sativus</i>	
Food - Plant Source: Rice, <i>Oryza sativa</i>	
Food - Plant Source: Rye, <i>Secale cereale</i>	
Food - Plant Source: Sage, <i>Salvia officinalis</i>	
Food - Plant Source: Sesame seed, <i>Sesamum indicum</i>	
Food - Plant Source: Soybean, <i>Glycine max</i>	
Food - Plant Source: Spinach, <i>Spinacia oleracea</i>	
Food - Plant Source: Squash, <i>Cucurbita maxima</i>	
Food - Plant Source: Squash, <i>Cucurbita moschata</i>	
Food - Plant Source: Sunflower Seed, <i>Helianthus annuus</i>	
Food - Plant Source: Thyme, <i>Thymus vulgaris</i>	
Food - Plant Source: Turnip, <i>Brassica rapa</i>	
Food - Plant Source: Walnut, Black, <i>Juglans nigra</i>	
Food - Plant Source: Walnut, English, <i>Juglans regia</i>	
Food - Plant Source: Wheat, Whole, <i>Triticum aestivum</i>	
Insects (Whole Body): Ant, Black, <i>Monomorium minimum</i>	
Insects (Whole Body): Ant, Carpenter, <i>Camponotus pennsylvanicus</i>	
Insects (Whole Body): Ant, Fire, <i>Solenopsis geminata</i>	
Insects (Whole Body): Ant, Fire, <i>Solenopsis invicta</i>	
Insects (Whole Body): Ant, Fire, <i>Solenopsis richteri</i>	
Insects (Whole Body): Ant, Red, <i>Monomorium pharaonis</i>	
Insects (Whole Body): Cockroach, American, <i>Periplaneta americana</i>	
Insects (Whole Body): Cricket, <i>Acheta domesticus</i>	

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Insects (Whole Body): House Fly, *Musca domestica*

Molds, Rusts and Smuts: *Aspergillus fumigatus*

Molds, Rusts and Smuts: *Aspergillus glaucus*

Molds, Rusts and Smuts: *Aspergillus niger*

Molds, Rusts and Smuts: *Aspergillus terreus*

Molds, Rusts and Smuts: Bermuda Grass Smut, *Ustilago cynodontis*

Molds, Rusts and Smuts: *Botrytis cinerea*

Molds, Rusts and Smuts: *Candida albicans*

Molds, Rusts and Smuts: *Chaetomium globosum*

Molds, Rusts and Smuts: Corn Smut, *Ustilago maydis*

Molds, Rusts and Smuts: *Curvularia spicifera*

Molds, Rusts and Smuts: *Epicoccum nigrum*

Molds, Rusts and Smuts: *Epidermophyton floccosum*

Molds, Rusts and Smuts: *Fusarium solani*

Molds, Rusts and Smuts: *Geotrichum candidum*

Molds, Rusts and Smuts: *Mucor mucedo*

Molds, Rusts and Smuts: *Mucor plumbeus*

Molds, Rusts and Smuts: *Mucor racemosus*

Molds, Rusts and Smuts: *Neurospora sitophila*

Molds, Rusts and Smuts: *Nigrospora sphaerica*

Molds, Rusts and Smuts: Oat Smut, *Ustilago avenae*

Molds, Rusts and Smuts: *Penicillium chrysogenum*

Molds, Rusts and Smuts: *Penicillium notatum*

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Molds, Rusts and Smuts: <i>Phoma destructiva</i>
Molds, Rusts and Smuts: <i>Rhodotorula mucilaginosa</i>
Molds, Rusts and Smuts: <i>Saccharomyces cerevisiae</i>
Molds, Rusts and Smuts: <i>Stemphylium sarciniforme</i>
Molds, Rusts and Smuts: <i>Trichophyton mentagrophytes</i>
Molds, Rusts and Smuts: <i>Trichophyton rubrum</i>
Molds, Rusts and Smuts: <i>Trichophyton tonsurans</i>
Molds, Rusts and Smuts: <i>Verticillium albo-atrum</i>
Plants and Plant Parts: Gum, <i>Tragacanth</i> , <i>Astragalus gummifer</i>
Plants and Plant Parts: Henna, <i>Lawsonia inermis</i>
Plants and Plant Parts: Kapok, <i>Ceiba pentandra</i>
Pollens - Cultivated Farm Plants: Alfalfa, <i>Medicago sativa</i>
Pollens - Cultivated Farm Plants: Corn, <i>Zea mays</i>
Pollens - Cultivated Farm Plants: Wheat, Cultivated, <i>Triticum aestivum</i>
Pollens - Flowers: Cosmos, <i>Cosmos bipinnatus</i>
Pollens - Flowers: Dahlia, <i>Dahlia pinnata</i> x. <i>coccinea</i>
Pollens - Flowers: Dandelion <i>Taraxacum officinale</i>
Pollens - Flowers: Sunflower, <i>Helianthus annuus</i>
Pollens - Grasses: Bahia Grass, <i>Paspalum notatum</i>
Pollens - Grasses: Barley, Cultivated, <i>Hordeum vulgare</i>
Pollens - Grasses: Bluegrass, Annual, <i>Poa annua</i>
Pollens - Grasses: Bluegrass, Canada, <i>Poa compressa</i>

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Pollens - Grasses: Canarygrass, Reed, Phalaris arundinacea

Pollens - Grasses: Canarygrass, Small, Phalaris minor

Pollens - Grasses: Corn, Cultivated, Zea mays

Pollens - Grasses: Grama Grass, Blue Bouteloua gracilis

Pollens - Grasses: Johnson Grass, Sorghum halepense

Pollens - Grasses: Oat, cultivated, Avena sativa

Pollens - Grasses: Rye, Cultivated, Secale cereale

Pollens - Grasses: Ryegrass, Italian, Lolium multiflorum

Pollens - Grasses: Saltgrass, Distichlis spicata

Pollens - Grasses: Sugar beet, Beta vulgaris

Pollens - Grasses: Velvetgrass, Holcus lanatus

Pollens - Grasses: Wheat, Cultivated, Triticum aestivum

Pollens - Trees: Acacia, Acacia longifolia

Pollens - Trees: Alder, Red, Alnus rubra

Pollens - Trees: Ash, Arizona (Velvet), Fraxinus velutina

Pollens - Trees: Ash, Green, Fraxinus pennsylvanica

Pollens - Trees: Ash, White, Fraxinus americana

Pollens - Trees: Aspen, Populus tremuloides

Pollens - Trees: Bayberry (Sweet Gale), Myrica gale

Pollens - Trees: Beech, American, Fagus grandifolia

Pollens - Trees: Birch, Paper, Betula papyrifera

Pollens - Trees: Birch, River, Betula nigra

Pollens - Trees: Birch, Sweet (Cherry), Betula lenta

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

- Pollens - Trees: Birch, White (Gray), Betula populifolia
- Pollens - Trees: Box Elder, Acer negundo
- Pollens - Trees: Juniper, Pinchot, Juniperus pinchotii
- Pollens - Trees: Cedar, Red, Juniperus virginiana
- Pollens - Trees: Cottonwood, Eastern, Populus deltoides
- Pollens - Trees: Cypress, Bald, Taxodium distichum
- Pollens - Trees: Elm, American, Ulmus americana
- Pollens - Trees: Elm, Cedar, Ulmus crassifolia
- Pollens - Trees: Elm, Chinese, Ulmus pumila
- Pollens - Trees: Fir, Douglas, Pseudotsuga menziesii
- Pollens - Trees: Gum, Black, Nyssa sylvatica
- Pollens - Trees: Gum, Sweet, Liquidambar styraciflua
- Pollens - Trees: Hackberry, Celtis occidentalis
- Pollens - Trees: Hackberry, Southern-Sugarberry, Celtis laevigata
- Pollens - Trees: Hazelnut, American, Corylus americana
- Pollens - Trees: Hemlock, Western, Tsuga heterophylla
- Pollens - Trees: Hickory, Pignut, Carya glabra
- Pollens - Trees: Hickory, Shagbark, Carya ovata
- Pollens - Trees: Hickory, White, Carya tomentosa
- Pollens - Trees: Juniper, One-seed, Juniperus monosperma
- Pollens - Trees: Juniper, Rocky Mountain, Juniperus scopulorum
- Pollens - Trees: Locust, Black, Robinia pseudoacacia

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Pollens - Trees: Maple, Hard, Acer saccharum

Pollens - Trees: Maple, Red, Acer rubrum

Pollens - Trees: Maple, Soft, Acer saccharinum

Pollens - Trees: Mesquite, Prosopis juliflora

Pollens - Trees: Mulberry, Paper, Broussonetia papyrifera

Pollens - Trees: Mulberry, Red, Morus rubra

Pollens - Trees: Mulberry, White, Morus alba

Pollens - Trees: Oak, Black Jack, Quercus marilandica

Pollens - Trees: Oak, Black, Quercus velutina

Pollens - Trees: Oak, Bur, Quercus macrocarpa

Pollens - Trees: Oak, California Live, Quercus agrifolia

Pollens - Trees: Oak, Live, Quercus virginiana

Pollens - Trees: Oak, Post, Quercus stellata

Pollens - Trees: Oak, Red, Quercus rubra

Pollens - Trees: Oak, White, Quercus alba

Pollens - Trees: Olive, Olea europaea

Pollens - Trees: Palm, Date, Phoenix dactylifera

Pollens - Trees: Pecan, Carya illinoensis

Pollens - Trees: Pepper Tree, Brazilian, Schinus terebinthifolius

Pollens - Trees: Pepper Tree, California, Schinus molle

Pollens - Trees: Pine, Loblolly, Pinus taeda

Pollens - Trees: Pine, Scotch, Pinus sylvestris

Pollens - Trees: Pine, White (Eastern), Pinus strobus

Pollens - Trees: Pine, White (Western), Pinus monticola

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Pollens - Trees: Poplar, White, <i>Populus alba</i>
Pollens - Trees: Privet, <i>Ligustrum vulgare</i>
Pollens - Trees: Spruce, Blue, <i>Picea pungens</i>
Pollens - Trees: Sycamore, Arizona, <i>Platanus wrightii</i>
Pollens - Trees: Sycamore, Mapleleaf, <i>Platanus acerifolia</i>
Pollens - Trees: Sycamore, Western, <i>Platanus racemosa</i>
Pollens - Trees: Tree of Heaven, <i>Ailanthus altissima</i>
Pollens - Trees: Walnut, Black, <i>Juglans nigra</i>
Pollens - Trees: Willow, Black, <i>Salix nigra</i>
Pollens - Trees: Willow, Pussy, <i>Salix discolor</i>
Pollens - Weeds and Garden Plants: Allscale, <i>Atriplex polycarpa</i>
Pollens - Weeds and Garden Plants: Careless Weed, <i>Amaranthus palmeri</i>
Pollens - Weeds and Garden Plants: Cocklebur, <i>Xanthium strumarium</i>
Pollens - Weeds and Garden Plants: Cocklebur, Spiny, <i>Xanthium spinosum</i>
Pollens - Weeds and Garden Plants: Dock, Sour or Sheep Sorrel, <i>Rumex acetosella</i>
Pollens - Weeds and Garden Plants: Dock, Tall, <i>Rumex altissimus</i>
Pollens - Weeds and Garden Plants: Dock, Yellow (Curly Dock), <i>Rumex crispus</i>
Pollens - Weeds and Garden Plants: Firebush, <i>Kochia scoparia</i>
Pollens - Weeds and Garden Plants: Goldenrod, <i>Solidago canadensis</i>
Pollens - Weeds and Garden Plants: Greasewood, <i>Sarcobatus vermiculatus</i>
Pollens - Weeds and Garden Plants: Hemp, <i>Cannabis sativa</i>
Pollens - Weeds and Garden Plants: Lamb's Quarters, <i>Chenopodium album</i>

Allergy Labs of Oklahoma. Table 2: Licensed non-standardized allergenic extracts with correct identifiers

Pollens - Weeds and Garden Plants: Marshelder, Narrowleaf, *Iva angustifolia*

Pollens - Weeds and Garden Plants: Mugwort, Common, *Artemisia vulgaris*

Pollens - Weeds and Garden Plants: Mugwort, Western, *Artemisia ludoviciana*

Pollens - Weeds and Garden Plants: Pigweed, Rough Redroot, *Amaranthus retroflexus*

Pollens - Weeds and Garden Plants: Pigweed, Spiny, *Amaranthus spinosus*

Pollens - Weeds and Garden Plants: Plantain, English, *Plantago lanceolata*

Pollens - Weeds and Garden Plants: Povertyweed, Small, *Iva axillaris*

Pollens - Weeds and Garden Plants: Ragweed, Desert, *Ambrosia dumosa*

Pollens - Weeds and Garden Plants: Ragweed, Giant (Tall), *Ambrosia trifida*

Pollens - Weeds and Garden Plants: Ragweed, Southern, *Ambrosia bidentata*

Pollens - Weeds and Garden Plants: Russian Thistle, *Salsola kali*

Pollens - Weeds and Garden Plants: Sagebrush, Common, *Artemisia tridentata*

Pollens - Weeds and Garden Plants: Saltbush, Annual, *Atriplex wrightii*

Pollens - Weeds and Garden Plants: Scale, Wing (Shad), *Atriplex canescens*

Pollens - Weeds and Garden Plants: Sedge, *Carex barbarae*

Pollens - Weeds and Garden Plants: Sheep Fat, *Atriplex confertifolia*

Pollens - Weeds and Garden Plants: Wingscale, *Atriplex canescens*

Pollens - Weeds and Garden Plants: Wormwood, Annual, *Artemisia annua*