Docto Rx's Allergy Formula

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ALTERNARIA ALTERNATA

Genus/species: Alternaria Alternata

Family: Pleosporaceae

Category: Mold

Comments: Being one of the most prevalent and invasive molds, *Alternaria Alternata* can be found on plants and substrates, foods and soils, textiles, dust, water, buildings, and in air conditioners. As such, it is nearly impossible to maintain complete avoidance from *A. Alternata*. This mold's airborne spores are most concentrated in the 'warm season' (from May to November), with the highest levels during late summer and early autumn. The greatest dispersion of *A. Alternata* occurs during dry periods due to a decreased relative humidity and increased wind velocity. Dry sunny afternoons are the most likely times to be symptomatic.

AMERICAN COCKROACH

Genus/species: Periplaneta americana

Family: Blattidae

Category: Misc

Comments: *Cockroach* allergens can present themselves from various parts of the insect. A rash can form on the skin from contact with *Cockroach* allergens, from touching the insect itself, or from exciting the frass (cockroach droppings) by vacuuming or sweeping. The reactivity to *Cockroach* allergens is one of the few that most routinely includes asthma. Avoidance is one of the major keys to fighting the symptoms; use commonsense techniques to dispose or conceal unwanted food, water, pet food and waste. For more serious infestations, consult an exterminator.

AMERICAN ELM

Genus/species: Ulmus americana

Family: Ulmaceae

Category: Tree

Comments: The *American Elm* typically flowers at two distinct times; thus the times of most severe allergic reactions to the airborne grains would be from January to February at lower latitudes and from March to April at Northern latitudes, although some late flowering elms can blossom from summer to November. Because of the general aesthetic attraction to the *American Elm,* i.e. its popularity as a shade tree in urban settings and occasional cultivation in rural ones – as well as the tree's prolific abundance throughout much of the U.S. – avoidance can be challenging for those allergic. There is extensive cross-reactivity amongst the individual members of the family *Ulmaceae*, and one study indicates that individuals suffering from melon allergy can be more sensitive to suffer from asthma and allergic reactions to this particular genus.

ASPERGILLUS FUMIGATUS

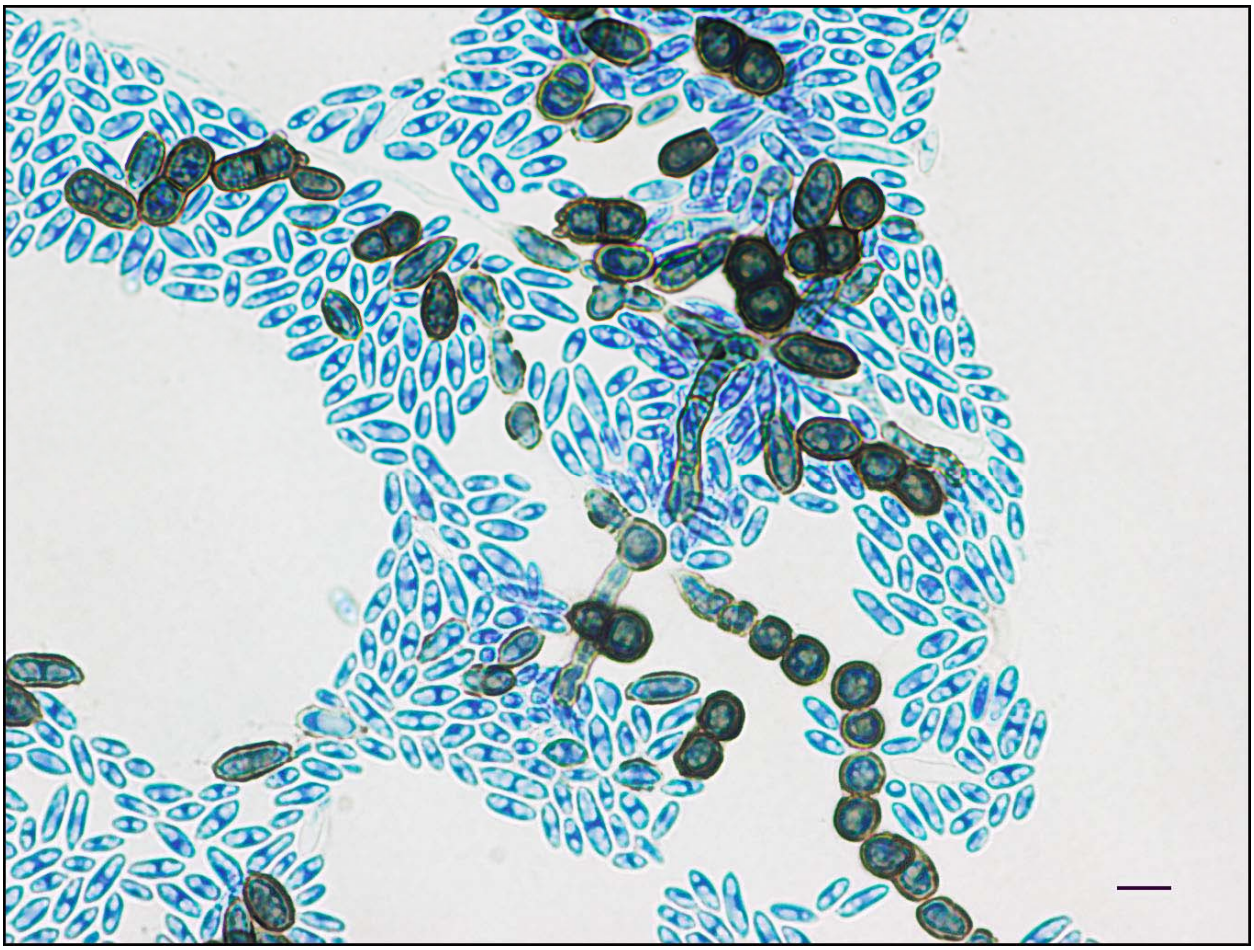
Genus/species: Aspergillus fumigatus

Family: Trichocomaceae

Category: Fungus

Comments: *Aspergillus fumigatus* is one of the most abundant and resourceful funguses, propagating in soils, compost, bird droppings, and tobacco. So prolific is this fungus as an aeroallergen that nearly all humans are continuously inhaling its spores. While most individuals efficiently eliminate the microorganism by the immune system, some – especially those that are immunocompromised – may develop mild to severe reactions, severe systemic diseases, even aspergillosis (fungal infection from this genus).

AUREOBASIDIUM PULLULANS



Genus/species: Aureobasidium pullulans

Family: Dothioraceae

Category: Mold

Comments: A pervasive mold, *Aureobasidium pullulans* can be found in widely varied habitats like bathrooms and kitchens, deposits such as water, soil, limestone, and quarried rock, naturally in produce and feed like berries, grapes, apples, wheat, oats, and barley, and even can colonize on an organism's hair, nails and skin. The microorganism thrives in temperate zones, but has been recorded from Canada to Antarctica, the U.S. to Russia. Avoidance is unlikely.

BERMUDA GRASS

Genus/species: Cynodon dactylon

Family: Poaceae

Category: Grass

Comments: Like Bahia grass, Bermuda grass has become a mainstay in the U.S. for use in both lawns and pastures. This grass is ideally suited as a major component of golf greens because its density can resist foot traffic, and even after a sheer mowing it can be well maintained. Like all grasses, the best way to keep allergens minimal is by constant watering and mowing. The former relieves the grass from stress and the latter prevents seed heads from blossoming, both of which help to eliminate pollen production. It is considered one of the three 'Southern grasses.'

BERMUDA GRASS SMUT

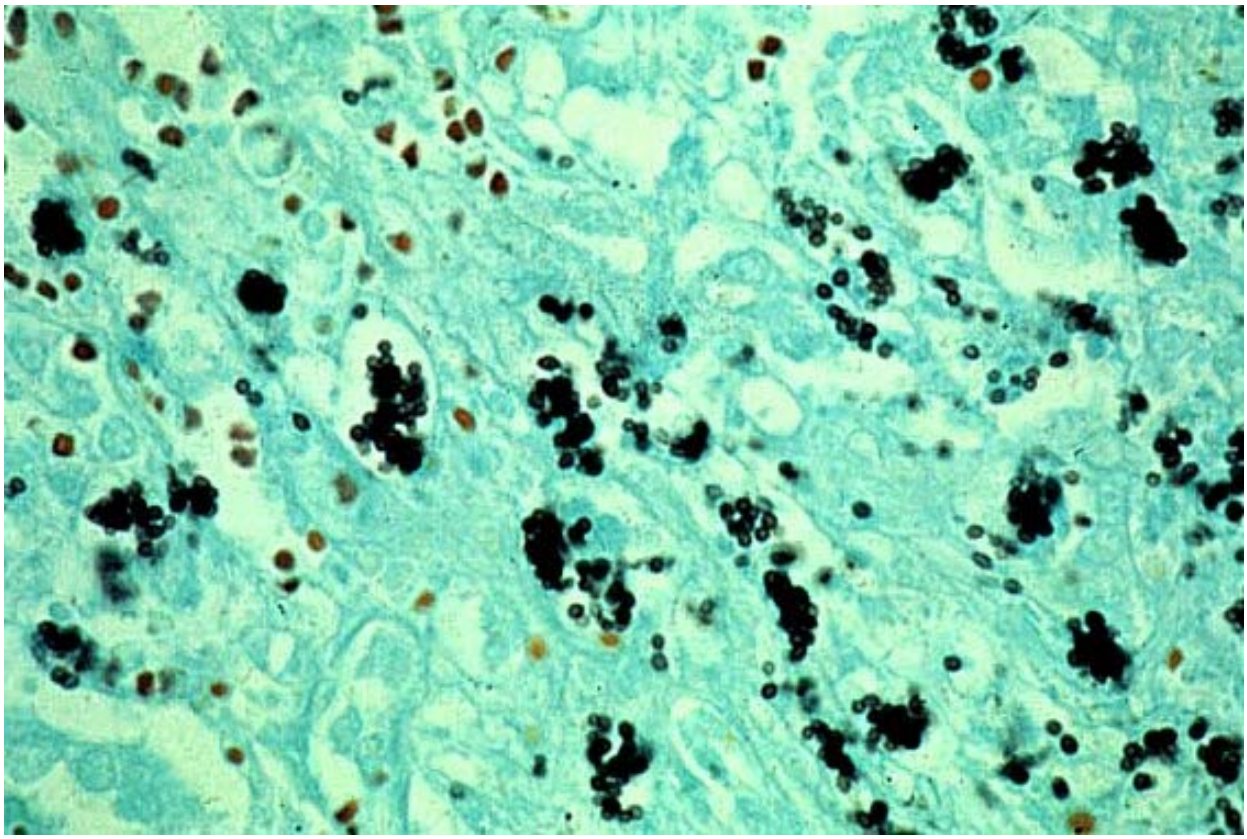
Genus/species: Ustilago cynodotis

Family: Ustilaginaceae

Category: Fungus

Comments: A fungus disease that affects the seed heads of Bermuda Grass, this *Smut* reduces the bud and/or blossom to a fine black powder, which, to those allergic, triggers a reaction when inhaled. Mowing infected grass can exacerbate the contagion by further exciting the particles. The allergen is most prevalent in late spring and early summer, especially during wet weather.

BIPOLARIS SOROKINIANA



Genus/species: Bipolaris Sorokiniana

Family: Pleosporaceae

Category: Fungus

Comments: *Bipolaris sorokiniana*, or known in its sexual stage as *Cochliobolus sativus*, is a cereal related fungus typically responsible for disease of the root (known commonly as root rot) head, leaf, and stem tissue. *B. sorokiniana* is also the main causal agent responsible for spot blotch. This microorganism is most commonly a blight to wheat and barley crops. Like all funguses, *B. sorokiniana* triggers a reaction by the release of its airborne spores. For sensitive individuals, it is best to avoid agroindustrial areas and to reduce household plants.

BLACK WALNUT POLLEN

Genus/species: Juglans nigra

Family: Juglandaceae

Category: Tree

Comments: The *Black Walnut* is important for its agronomy in timber and furniture. While the flesh of the nut is tasty, its thick outer husk is difficult to overcome. These trees blossom in late spring and early summer. Due to the relative heft of the pollen grain, the *Black Walnut* allergen does not travel far, but in areas where these trees are commercially cultivated the atmosphere can be severely pollen-laden. Individuals who are allergic by inhalation will most certainly have the food allergy.

BLACK WILLOW

Genus/species: Salix nigra

Family: Salicaceae

Category: Tree

Comments: The *Black Willow* is abundant in wet areas and along waterways, and is usually one of the first to habitate sandbars and riverbanks. Wind-dispersed allergens can become extremely concentrated when these trees blossom in the spring.

BOX ELDER

Genus/species: Acer negundo

Family: Aceraceae

Category: Tree

Comments: Known by nearly 2 dozen names, *Box Elder* can also be known as Black Ash, Cutleaf Maple, or Red River Maple. It is native to Eastern and Midwest U.S. but can be found throughout most of the country. This tree flowers in early spring, and is extensively cross-reactive to other species in the same family and to the Norway Maple.

CARELESS WEED

Genus/species: Amaranthus palmeri

Family: Amaranthaceae

Category: Plant

Comments: The careless weed is native to most of the southern half of the US and is considered a genetic modification of the cotton and soybean crops. Their pollen is easily spread by wind, harvesting, and dirty equipment and is known for being one of the most aggressive pigweed species in regards to its growth rate and competitive ability. Because of its toxicity to livestock and rapid overproduction it is seen as a noxious weed and a competitor to other more marketable crops.

CLADOSPORIUM HERBARUM

Genus/species: Cladosporium herbarum

Family: Davidiellaceae

Category: Mold

Comments: The most frequently inhaled air-disposed mold, *Cladosporium herbarum* occurs abundantly on fading and dead leaves, textiles, paints, produce, humans, and substrates. This allergen is found equally indoors and outdoors, and because of its near worldwide abundance, total avoidance is unexpected.

CLADOSPORIUM SPHAEROSPERMUM

Genus/species: Cladosporium Sphaerosopermum

Family: Davidiellaceae

Category: Mold

Comments: While not as common as other molds, *Cladosporium sphaerospermum* occurs worldwide, is found naturally in soils, plants, building materials, and insulation, and occurs equally indoors and outdoors. Complete avoidance is difficult, especially during the 'warm season,' but airborne allergens may be diminished during the winter months.

COCKLEBUR

Genus/species: Xanthium strumarium

Family: Asteraceae

Category: Weed

Comments: Found worldwide, the *Cocklebur* is a weed that flowers from early summer to mid-autumn. Typically found in rundown and abandoned pastures, ditches, cultivated fields, and waste areas, it is best to avoid these areas for the allergic individual, especially during the warm season.

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www.drsallergy.com

COMMON MUGWORT

Genus/species: Artemisia douglasiana

Family: Asteraceae

Category: Weed

Comments: With such distinguished names as felon herb, wild wormwood, old man, Uncle Henry, and sailor's tobacco, *Common Mugwort* has a long and celebrated history as a magical herb for poultices and repellants, and as nourishment and garnishes since ancient times. Even today this plant is used for health issues, to spice food and drinks, and is the source of wormwood oil. A relative of the ragweed, *Mugwort* flowers from mid summer to mid autumn and is one of the main triggers for hay fever for those allergic.

D. FARINAE MITE

Genus/species: Dermatophagoides farinae

Family: Pyroglyphidae

Category: Misc

Comments: Commonly called the house dust mite, *Dermatophagoides farinae* has a life cycle of 35 to 70 days, producing roughly an egg a day. Allergic individuals most often present symptoms such as asthma, rhinitis, and conjunctivitis. These episodes are usually most severe nocturnally or in the early morning. Avoidance techniques include increased cleaning, keeping indoor humidity below 55%, removal of wall-to-wall carpets, and use of mite-proof mattress and pillow covers.

D. PTERONYSSINUS MITE

Genus/species: Dermatophagoides pteronyssinus

Family: Pyroglyphidae

Category: Misc

Comments: Commonly called the house dust mite, *Dermatophagoides farinae* has a life cycle of 35 to 70 days, producing roughly an egg a day. Allergic individuals most often present symptoms such as asthma, rhinitis, and conjunctivitis. These episodes are usually most severe nocturnally or in the early morning. Avoidance techniques include increased cleaning, keeping indoor humidity below 55%, removal of wall-to-wall carpets, and use of mite-proof mattress and pillow covers.

DOG EPITHELIA

Genus/species: Canine coronavirus

Family: Coronaviridae

Category: Misc

Comments: *Dog Epithelia* are the layers of skin that are daily shed into the dog's environment. The discarded skin cells comprise the allergens and, once airborne, become hazardous to susceptible individuals. Techniques for avoidance include daily brushings and vacuuming, frequent showering, and in worst-case scenarios keeping the dog off of furniture and beds.

DRECHSLERA SPICIFERA

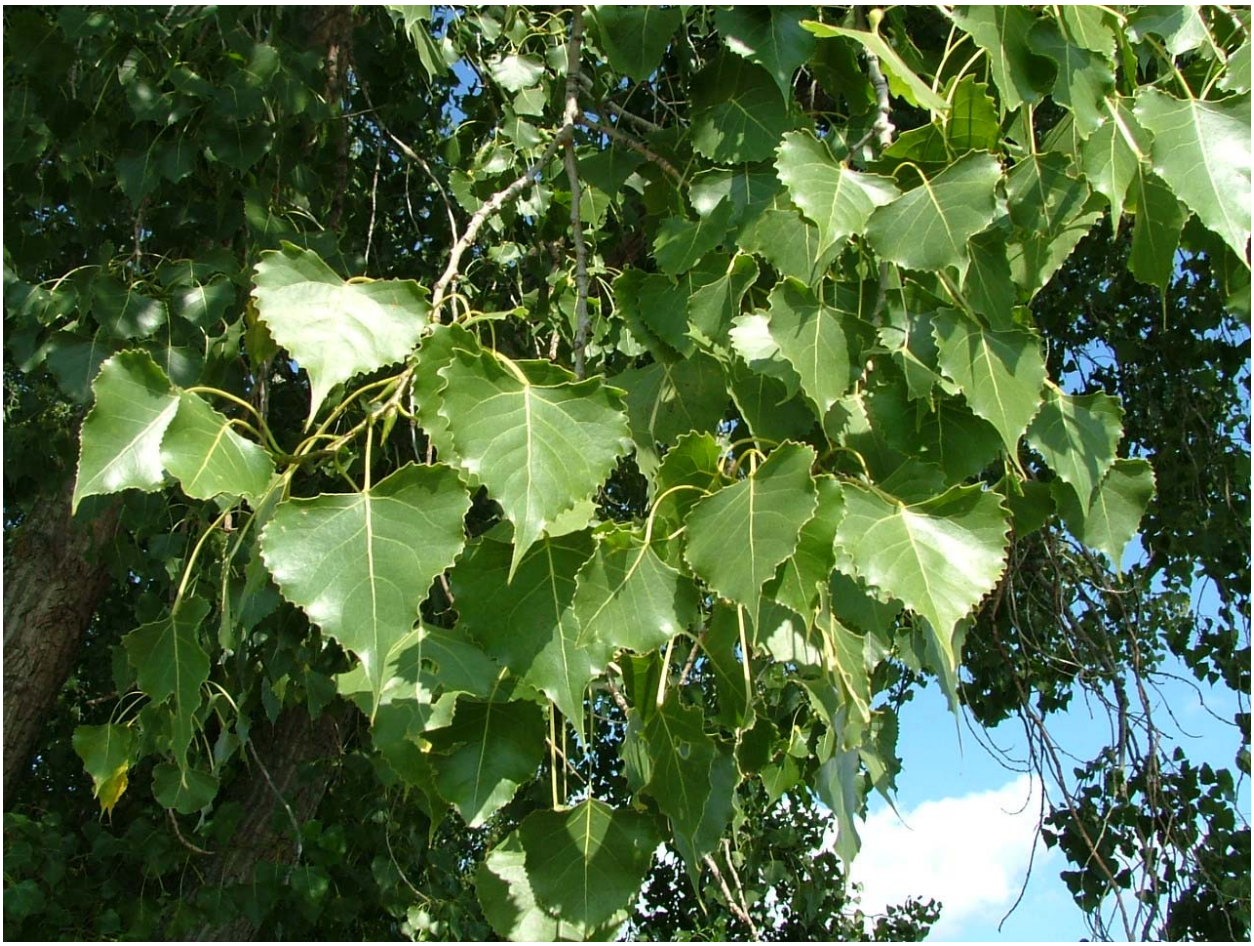
Genus/species: Drechslera spicifera

Family: Cochliobolus

Category: Fungus

Comments: Known also as Curvularia spicifera or Bipolaris spicifera, *Drechslera spicifera* is a fungus that typically inhabits soils, plants, and grasses, but has been known to not only cause allergic reactions in humans but also infect them with a litany of diseases. This dark-colored fungus is fast growing and fairly ubiquitous worldwide. Ideal avoidance techniques would be to humidify and air-condition properly and consistently.

EASTERN COTTONWOOD



Genus/species: Populus tremuloides

Family: Salicaceae

Category: Tree

Comments: A member of the Poplar family, the *Eastern Cottonwood* derives its name from the cotton-like down that protrudes from the seeds. This fluff gets released soon after pollination, but this is not the main cause of allergies. The pollen released early to mid spring is the aeroallergen responsible for allergy-related symptoms. There is relative cross-reactivity between members of the family *Salicaceae*. Best course of action would be to avoid warm and breezy spring afternoons.

EASTERN SYCAMORE

Genus/species: Platanus occidentalis

Family: Platanaceae

Category: Tree

Comments: Also known as the Buttonwood, The *Eastern Sycamore* has long been valued as a wood used for making buttons (hence the alternative nomenclature). Sycamores grow best along rivers and disturbed soil, shooting up rapidly and blooming each spring. Cross-reactivity between other members of the family *Platanaceae* and genus *Platanus* is not uncommon.

ENGLISH PLANTAIN

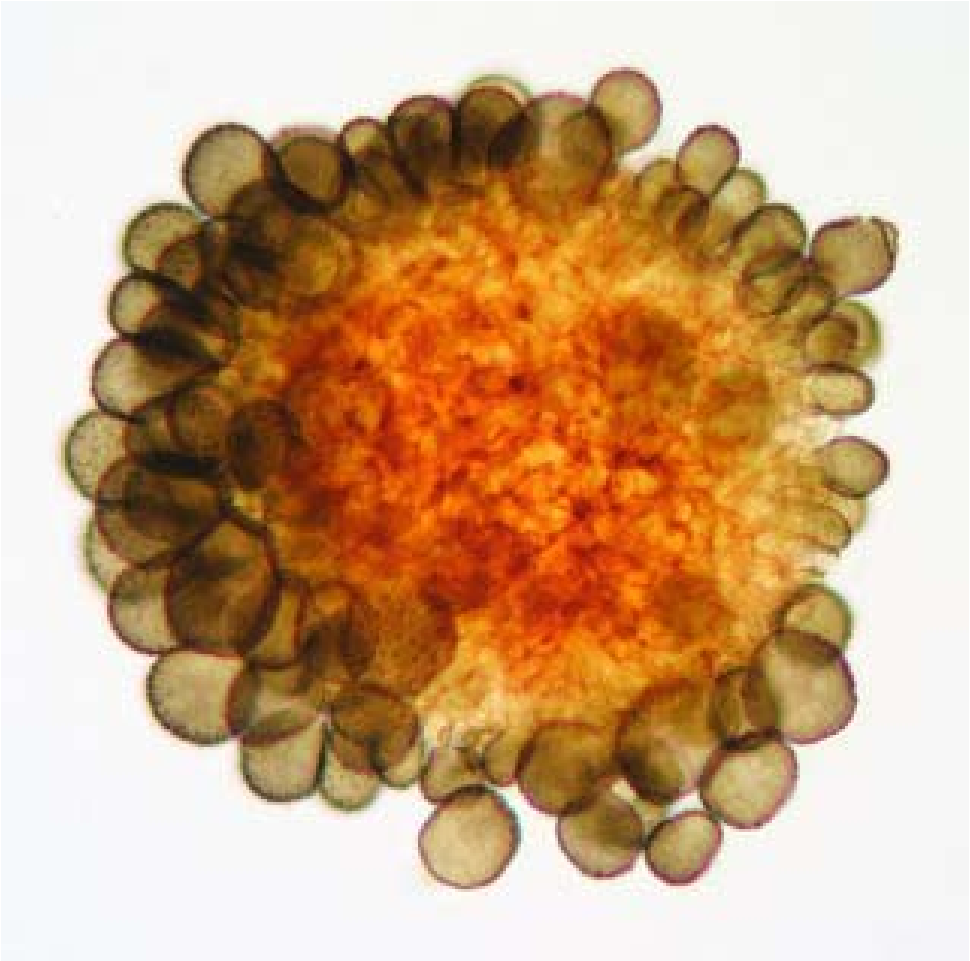
Genus/species: Olantago lanceolata

Family: Plantaginaceae

Category: Weed

Comments: The *English Plantain* is a bush-like weed that is known also as the Ribwort, Buckhorn, and Narrowleaf Plantain. It is invasive and widespread throughout the U.S., found in pastures, meadows, lawns, and roadsides. This weed flowers from May to October; thus, the best avoidance technique is staying indoors on hot, windy days during this time period.

EPICOCCUM NIGRUM



Genus/species: Epicoccum nigrum

Family: Incertae sedis

Category: Fungus

Comments: Found worldwide, *Epicoccum nigrum* is a fungus most aggressive to plants and seeds. Besides its capability to trigger allergic reactions to sensitive individuals, this fungus has also been known to cause upper and lower respiratory tract infections. Compared to other funguses, *Epicoccum nigrum* causes the greatest sensitivity to skin. Allergenic responses are heightened in late summer and fall. For those allergic, the key to less severe symptoms is by reducing humidity in the home, and minimizing houseplants.

FEATHER MIX

Genus/species: NA

Family: NA

Category: Misc

Comments: While rare, feather allergies have often been confused with dust might allergies because of the perceived notion that dust mites breed extensively in down. While there has been no evidence to support this claim, feather allergy alone is known to exist; there can be cross-reactivity between feathers from different species and breeds. For those allergic, it is best to own synthetic bedding, sheets, and pillows.

FIREBUSH/KOCHIA

Genus/species: Kochia scoparia

Family: Amaranthaceae

Category: Plant

Comments: Known as Firebush, Kochia, Common Kochia, Burning Bush, Summer Cypress, and Mexican-fireweed the Kochia is found in naturalized to nearly all of the northern United States and is continuing to spread. The Kochia flowers in midsummer but there is a high variation in the flowering time depending on the population and region. It is highly adaptable and aggressive found in many areas ranging from pastures to wastelands.

FUSARIUM MONILIFORME

Genus/species: Fusarium moniliforme

Family: Nectriaceae

Category: Fungus

Comments: A common soil and grass fungus, *Fusarium moniliforme* is a worldwide parasite of most cereals and grains. While this microorganism is usually an affliction to rice, corn, bananas, watermelons, and sugarcane, *F. moniliforme* is fairly opportunistic and is even known to infect animals and humans. It is not only the spores this fungus produces that are allergenic, but the mycotoxins as well that can be responsible for triggering allergic reactions. Because of its ubiquity, the primary method of avoidance is by keeping indoor humidity below 55% and by avoiding agro-industrial areas during the warm season.

GERMAN COCKROACH

Genus/species: Blattella germanica

Family: Blattodea

Category: Misc

Comments: Typically smaller than its American counterpart, the *German Cockroach* is particularly associated with nursing homes, hotels, and food-related facilities. These insects are very resilient to most forms of pest control, due to its miniature size – it can fit in spaces most other cockroaches could not – their rapid development to sexual maturity, and the large number of eggs they produce. The major source of allergens from the *Cockroach* is from its frass (droppings), and due to its heft most likely triggers a reaction from getting excited by either sweeping or vacuuming. Avoidance is one of the major keys to fighting the symptoms; use commonsense techniques to dispose or conceal unwanted food, water, pet food and waste. For more serious infestations, consult an exterminator.

For more information visit:
www.drsallergy.com

GIANT RAGWEED

Genus/species: Ambrosia artemisiifolia

Family: Asteraceae

Category: Weed

Comments: Also called Buffalo Weed, Greatweed, and Bitterweed, *Giant Ragweed* is one of the most invasive weeds in the U.S. This weed is one of the major causes of late summer hay fever. This *Ragweed* gets its name from its massive size, ranging from 10 to 15 feet. It is found alongside many roads in the U.S., thriving in disturbed soil. The *Giant Ragweed* blooms from late summer to early fall, and is often confused with Lamb's Quarters and Ragweeds because of the overlapping in pollination cycles and severity to the aeroallergens.

HACKBERRY

Genus/species: Celtis occidentalis

Family: Ulmaceae

Category: Tree

Comments: Also known as the American and Northern Hackberry, Beaverwood and Nettletree, this particular *Hackberry* is a hardwood native to the U.S. and is generally used for cheap furniture and fencing. This tree flowers in spring, with the highest levels of pollen occurring during the afternoon.

JOHNSON GRASS

Genus/species: Sorghum halepense

Family: Poaceae

Category: Grass

Comments: One of the three 'Southern Grasses,' *Johnson Grass* is used beneficially as forage and an erosion deterrent, but as a detriment it is one of the most invasive weeds worldwide. Typically blooming in abundance from late spring to early summer, this weed actually produces pollen year-round. For those allergic it is best to check local pollen levels before planning outdoor activities.

JOHNSON GRASS SMUT

Genus/species: Sorghum halepense

Family: Poaceae

Category: Mold

Comments: While it can be a boon for thwarting the invasive properties of the Johnson Grass, this *Smut* can be a detriment for sensitive individuals. Technically, this smut is a mold found fairly ubiquitously. While live *Johnson Grass Smut* propagates itself by releasing its spores into the air, when dead this mold usually becomes a fine airborne powder; both of these will trigger a reaction to those allergic. Even though avoidance is unlikely, symptoms may be reduced by avoiding dry, warm days, and by keeping indoor humidity below 60%.

LAMB'S QUARTER

Genus/species: Chenopodium album

Family: Amaranthaceae

Category: Weed

Comments: A plant that thrives in moist rich soil, *Lamb's Quarter* (also seen as *Lambsquarter, Lamb's Quarters,* and *Lambsquarters*) grows naturally in manure heaps, and in open spaces from coast to coast. As an herb, its leaves can be boiled and eaten as a variant of spinach, or used as a garnish or salad green. This plant's wind pollinated flowers expel copious amounts of pollen from mid-summer to autumn, and sensitive individuals should guard their lawns against these plants and should check pollen levels during the summer months.

MARSH ELDER

Genus/species: Iva microcephala

Family: Asteraceae

Category: Tree

Comments: Also known as Sumpweed or True Marsh Elder, *Rough Marsh Elder* is native to the U.S. and has been used by Native Americans for over 4 millennia. This weed can be found in wet, damp settings, prairies and meadows, and along roadsides and riverbanks. This *Elder* flowers from mid-summer to mid-autumn and is one of the greatest causes of hay fever. There is extensive cross-reactivity between other members of the family *Iva*, to which ragweed belongs.

MEADOW FESCUE GRASS

Genus/species: Festuca pratensis

Family: Poaceae

Category: Grass

Comments: Primarily used as grass for pastures, *Meadow Fescue Grass* can be utilized for hay or turf. When not utilized, this grass can crop up as a weed in meadows, and swamps, and along roads and riverbanks. This grass expels its pollen from mid to late summer. There is extensive cross-reactivity between the members of the family *Poaceae.*

MESQUITE

Genus/species: Prosopis glandulosa

Family: Fabaceae

Category: Tree

Comments: Commonly called Honey Mesquite, the *Mesquite* is a tree native to and found throughout much of the continental U.S. Despite its versatility and benefits – dense shade, rapid growth and edible and abundant seed pods – this tree is listed as one of the world's 100 most invasive species. The *Mesquite* typically flowers from late spring to late autumn, producing heavy amounts of wind-blown pollen. Moreover, individuals who are allergic to the pollen will most certainly be allergic to the airborne particulates released when the *Mesquite's* bark is utilized as a smoking agent for foodstuffs. Best avoidance techniques include checking pollen levels during the flowering season and to limit exposure to wood-burning grills and smokers (when the *Mesquite* is being used).

For more information visit:
www.drsallergy.com

MOUNTAIN CEDAR

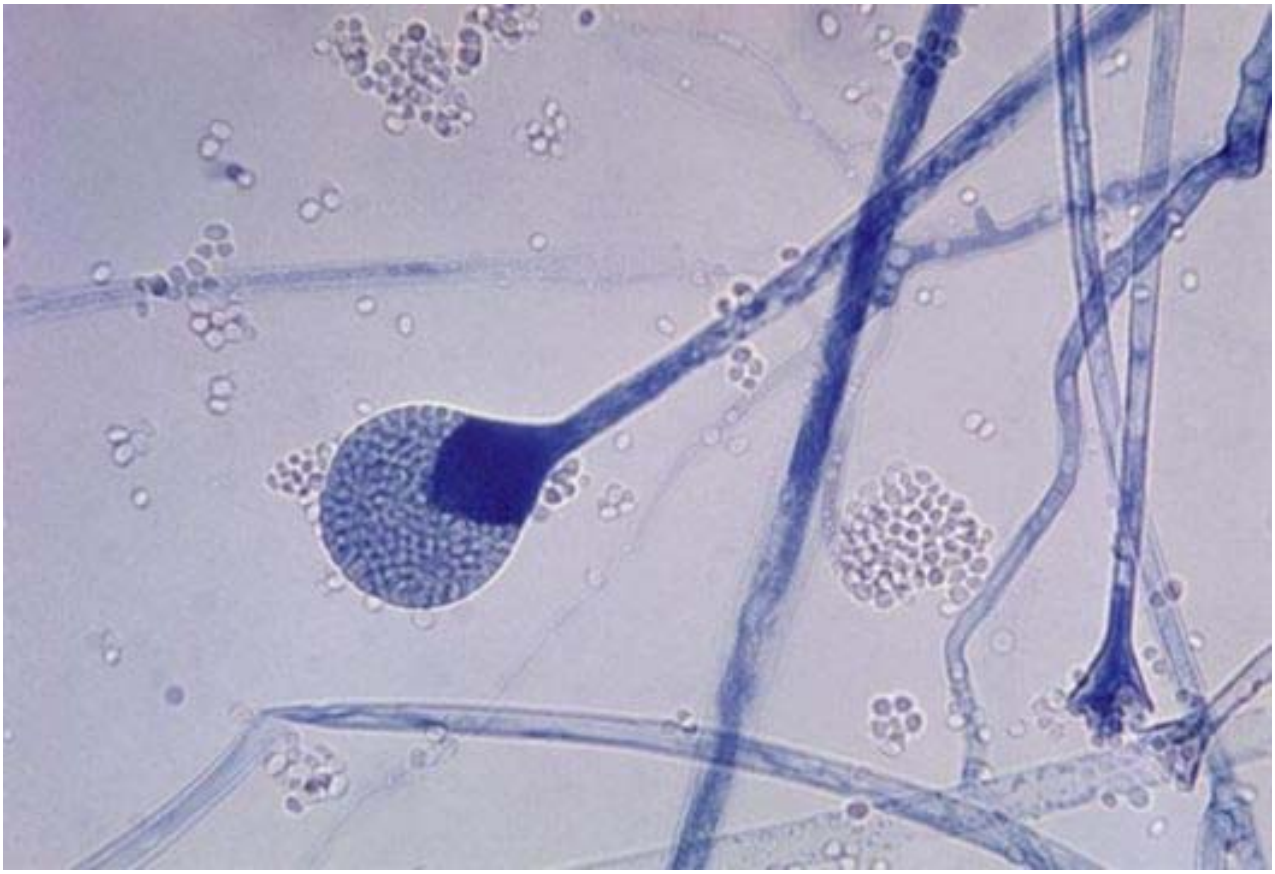
Genus/species: Juniperus ashei

Family: Cupressaceae

Category: Plant

Comments: The mountain cedar (also called Ashe Juniper, Post Cedar, or Blueberry Juniper) is a small tree or shrub native to the south-central United States. It is a drought-tolerant evergreen whose pollen causes severe allergic reactions for many during the winter. People allergic to the mountain cedar are also often allergic to its related Juniperus virginiana and therefore what often starts as an allergy in the winter will extend to the spring since pollinations occur in succession. Many locals refer to the allergy as cedar fever and it is best to avoid outdoors during its pollination if one is allergic.

MUCOR MIX



Genus/species: Mucor

Family: Mucoraceae

Category: Mold

Comments: The *Mucor* microbial is a genus that consists of about 3,000 species of molds found in rotten foods, soil, and even digestive systems. It is a common contaminant of stored and processed foods, is typically found in decaying fruits and vegetables as well as in soil, plants, and manure. Colonies are often white or gray and are extremely fast growing. Maintaining a dry environment and disposing of spoiled or near spoiled food is the best method of avoidance for *Mucor* mold.

NETTLE

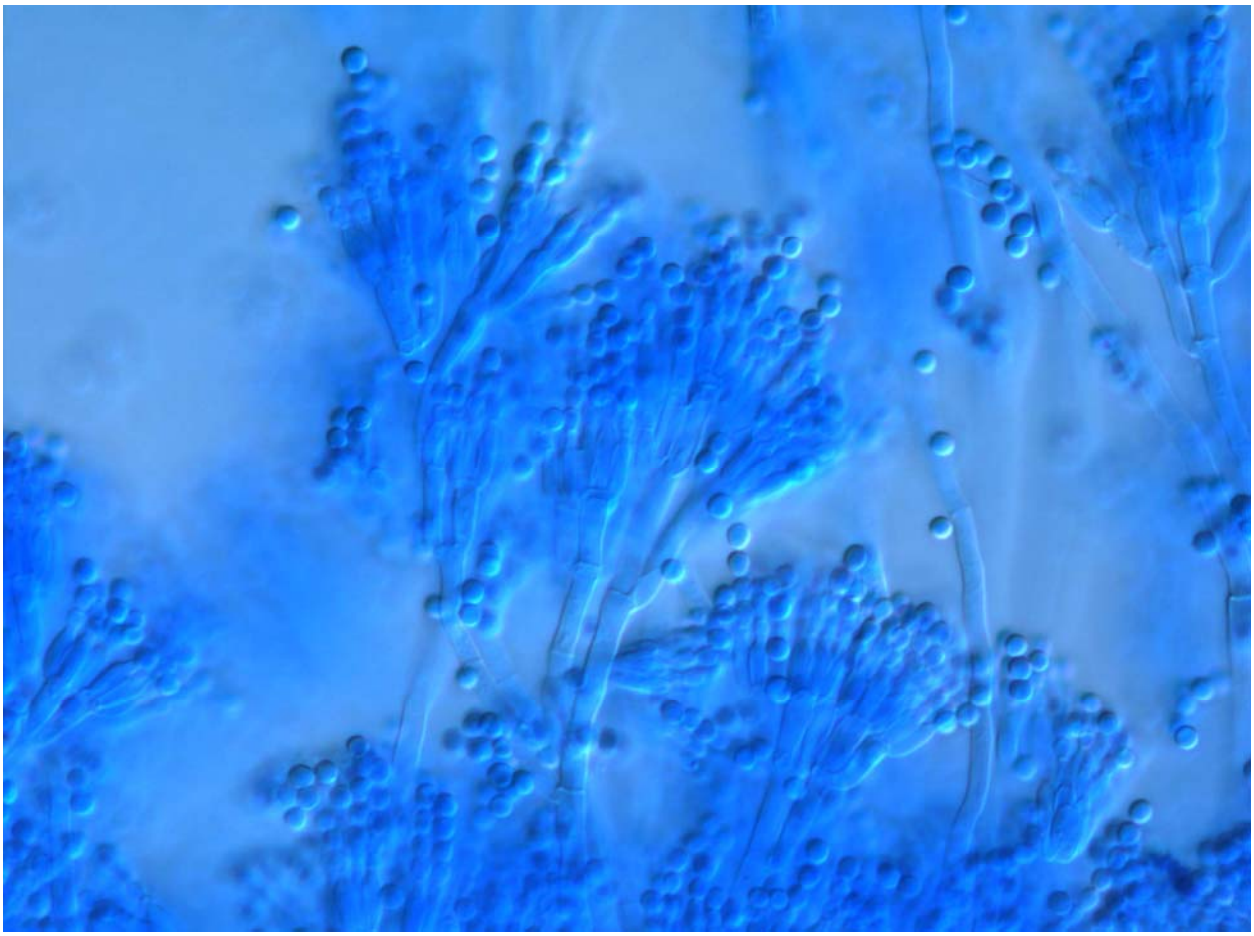
Genus/species: Urticaceae

Family: Urticaceae

Category: Plant

Comments: Found extensively across the U.S., the *Nettle* is fond of nitrogen and phosphate soils and grows naturally in woods and forests, wastelands and abandoned building sites. While it has long been cultivated as a remedy to treat a litany of ailments – like arthritis, bronchitis, and high blood pressure and dozens of others– the *Stinging* or *Common Nettle* gets its name from the expulsion of several toxic compounds from stinging hairs upon contact. This plant blooms from summer into late fall, and ironically is also used to treat allergy symptoms.

PENICILLIUM CHRYSOGENUM



Genus/species: Penicillium chrysogenum

Family: Trichocomaceae

Category: Fungus

Comments: A worldwide fungus, *Penicillium chrysogenum* is most commonly found in humid, damp, and water damaged buildings, and on salted foodstuffs. It is this fungus's method of self-propagation, the release of chains of spores to form new and distant colonies, which results in an allergic reaction. While this microorganism has been exploited for its antibiotic properties, it is important to keep humidity in check for sensitive individuals.

RED CEDAR

Genus/species: Juniperus virginiana

Family: Cupressaceae

Category: Tree

Comments: So severe is the allergy to the *Red Cedar* – actually a member of the Juniper family – that the term coined 'Cedar Fever' has been dreaded throughout much of the Southern U.S. It is one of the most insufferable allergies because of the extreme nature of airborne pollination from these trees. From November to March (with the highest level of pollen counts from December to February), a cloud of pollen can be seen surrounding these trees. Avoidance would be to keep indoors from mid-winter to mid spring, or, in extreme cases, relocation.

RED MAPLE

Genus/species: Acer rubrum

Family: Aceracea

Category: Tree

Comments: Also known as the Swamp, Soft, or Water Maple, the *Red Maple* is recognized by the U.S. Forest Service as the most common tree variety in the country. The tree is highly adaptable, living along rivers, in swamps, and even on dry, arid soils. Because of its attractive red foliage (and deep scarlet hue in autumn), the *Red Maple* is often used as a shade tree or ornament on lawns and in urban development. This tree blooms generally from April to May, and can produce high levels of pollen.

RED MULBERRY

Genus/species: Morus rubra

Family: Moraceae

Category: Tree

Comments: While this tree is common throughout most of the U.S., the *Red Mulberry* is listed as endangered throughout Canada and parts of New England. While the wood is soft, this tree has been cultivated for use in furniture, fencing, and tools, while the fruits are used for pies and jams. It typically blooms in early spring, with the male tree being highly allergenic.

RED/RIVER BIRCH

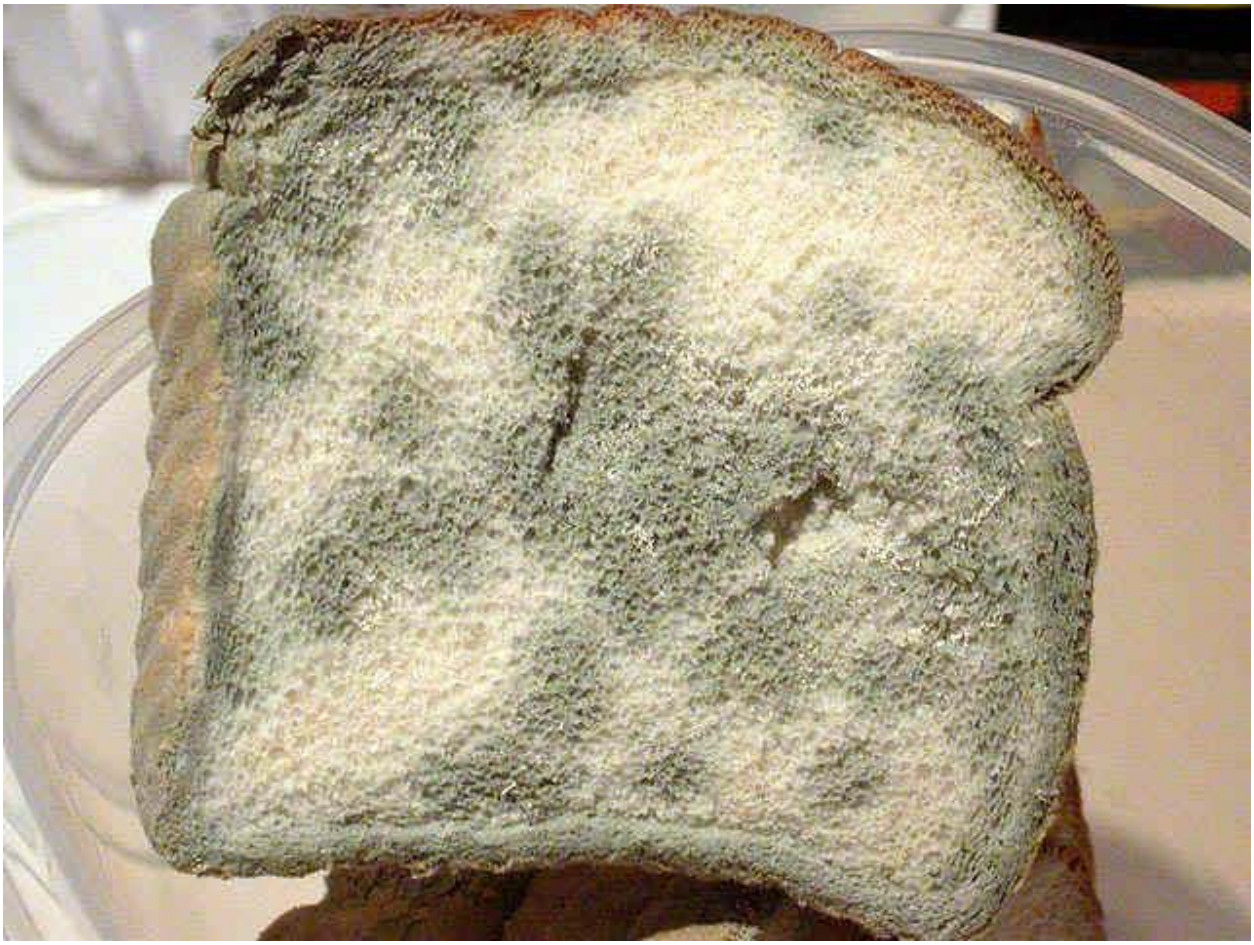
Genus/species: Betula nigra

Family: Betulaceae

Category: Tree

Comments: Commonly found in swamps and floodplains, the *River* or *Red Birch* is native to the U.S. While this tree is usually too knotty for use as timber, its distinctive bark has made this *Birch* a favorite as a decorative tree for landscaping. These trees bloom and produce large amounts of pollen every spring; their pollen grains are light and can travel large distances by wind. The best course of action for sensitive individuals is to avoid the outdoors when pollen counts are highest, and if necessary wear a facemask.

RHIZOPUS MIX



Genus/species: Rhizpous

Family: Mucoraceae

Category: Mold

Comments: *Rhizopus* is a genus of fungi that is commonly found on plants and specialized parasites. It is a fungus typically dependent on sugars and starches for propagation. Because of this, *Rhizopus* fungi are often found on breads, grapes, strawberries, jellies, syrups, peanuts, and tobacco. In moist environments this mold can quickly spread - generally within a few days. Best avoidance techniques are to keep foods in cool, dry places, and to reduce the number of houseplants.

RUSSIAN OLIVE TREE

Genus/species: Elaeagnus angustifolia

Family: Elaegnaceae

Category: Tree

Comments: The Russian Olive tree can thrive in many different environments ranging from different soils to different atmospheric conditions. Once rooted this tree can be very resilient proving to be difficult to control and almost impossible to exterminate. Efforts to thwart their growth have included mowing, cutting, spraying, bulldozing, and burning but have not proved very effective. This invasive shrub was originally planted due to its adaptability to provide food and cover but because of its prolific production it is now naturalized to many areas of the US and has become quite noxious.

SHAGBARK HICKORY

Genus/species: Carya ovata

Family: Juglandaceae

Category: Tree

Comments: A tremendously useful tree, the *Shagbark Hickory* is the most common Hickory in the Eastern U.S. This tree is cultivated for making bows, and tools, its bark is used to flavor meats and fish, and maple syrup, and its nuts are a food source for wildlife and used by humans as a pecan substitute. Even with all these advantages, this particular tree is known to be severely allergenic. Airborne pollination begins in spring, with the most abundant expulsion occurring towards the end of the season.

SHEEP SORREL

Genus/species: Rumex acetosella

Family: Polygonaceae

Category: Weed

Comments: While *Sheep Sorrel* is technically a weed, it has some culinary benefits as a garnish, salad green, and tart-flavoring agent. Also known as Red, Field, and Sour Sorrel, this weed can be allergenic year-round but flowers mostly from spring to early winter. There tends to be extensive cross-reactivity between the members of the *Rumex* genus. Underestimated in metropolitan areas, *Sheep Sorrel* can often be a trigger for sensitive individuals living in the city.

SHORT RAGWEED

Genus/species: Elatior ambrosia

Family: Asteraceae

Category: Weed

Comments: Considered to be the most widespread and potent allergen of all pollinators, the *Short Ragweed* can be abhorrent to susceptible individuals because of the difficulty ridding areas of this weed, the extraordinary levels (billions of pollen grains per weed) of pollen produced, and the potency of the protein in the pollen. *Ragweed* season typically begins mid-August and ends through October. This weed is usually solely responsible for the sensation known as Hay Fever. It is best to avoid vacant lots, roadsides, and wooded areas during abovementioned months.

STANDARDIZED CAT HAIR

Genus/species: Felis catus

Family: Felidae

Category: Misc

Comments: Twice as common as dog allergies, *Cat Hair* is allergenic to roughly 10% of the U.S. population. Typically, it's not the hair itself that triggers the allergy, but the dander, urine, and protein in the saliva that are responsible for being the cause. The best course of action is to wash hands after contact with cats, or if possible avoid direct contact altogether. It is also helpful to identify visitors who own cats. For those who own cats clean sheets and vacuum regularly, and consider bathing your pet routinely.

SWEET VERNAL GRASS

Genus/species: Anthoxanthum odoratum

Family: Poacaeae

Category: Grass

Comments: Due to its sweet aroma, *Sweet Vernal Grass* has become preferred for home use and landscaping. Also known as Holy, Vanilla, or Buffalo Grass, this grass can grow as a weed in pastures and meadows, along roads and railroad tracks. It usually flowers from early summer to late summer. *Sweet Vernal Grass* can be a major culprit for seasonal allergies.

TAG/HAZEL ALDER

Genus/species: Alnus serrulata

Family: Betulaceae

Category: Tree

Comments: Also called the Gray, Speckled, Mountain, or Hazel Alder, the *Tag* or *Smooth Alder* is perhaps the most common shrub in the Northern U.S. It is not infrequent throughout the south, where it can be found in wet, swampy settings at low elevation. While these shrubs produce their flowers in late winter, they tend to produce heavy amounts of pollen from late spring to mid summer. Be sure to keep outdoor activities to a minimum during periods of highest pollen count.

TIMOTHY GRASS

Genus/species: Phleum Pratense

Family: Poaceae

Category: Tree

Comments: A major source of forage and hay for livestock, *Timothy Grass* is one of the more durable grasses. It resists cold and drought, and thus tends to crop up as weeds in more arid settings. This grass flowers from mid summer to late autumn. Because *Timothy Grass* is one of the more common summer triggers, it is best to check local pollen levels to the sensitive individual.

WHITE ASH

Genus/species: Fraxinus americana

Family: Oleaceae

Category: Tree

Comments: The *White* or *American Ash* is one of the most cultivated trees in the U.S.; its timber has long been used for tools and sports equipment, flooring and furniture, musical instruments and even lobster traps. Because of its aesthetic appeal, *White Ash* has become a favorite in urban settings. Due to the general predilection for the *Ash*, avoidance tends to be difficult in rural and metropolitan locations. This tree tends to produce large amounts of airborne pollen, which can start as early as January and can last into summer. Be sure to check pollen counts before planning outdoor activities.

WHITE OAK

Genus/species: Querces alba

Family: Fagaceae

Category: Tree

Comments: The official state tree of Illinois, the *White Oak* is one of the most common hardwoods in the U.S. This particular tree does not thrive well in urban settings, but is very well suited and even desirable for residential, communal, and rural settings due to its wide spread crown for shade and appeal. With light winds, pollination can last from mid spring to late summer. Cross-reactivity is moderate between the more-than 500 species of Oak.

WHITE POPLAR

Genus/species: Populus alba

Family: Salicaceae

Category: Weed

Comments: Commonly called Abele, and also known as the Silver, Silverleaf Poplar, the *White Poplar* is a popular tree in the U.S. as an ornament on landscapes and for erosion prevention along coastlines, lakes, and rivers. In some parts of the U.S. this *Poplar* has become regarded as invasive. These trees flower in early spring, with the cottony down getting released shortly thereafter. Both of these are a major aeroallergen and source of hay fever in the U.S.

YELLOW/CURLY DOCK

Genus/species: Rumex crispus

Family: Polygonaceae

Category: Weed

Comments: Although an invasive weed, the *Yellow* or *Curly Dock* is actually consumable; while quite tart, its cooked leaves are an excellent source of Vitamin A, Iron, Potassium, and protein. This weed expels its pollen from early summer through autumn. There is general cross-reactivity between the *Yellow Dock* and Ragweed. The best course of action for avoidance is generally to keep windows shut and air conditioner consistently running, plan outdoor activities to avoid days of highest pollen count, and be cognizant of warm and dry days during the abovementioned time period.

YELLOW PINE

Genus/species: Pinus ponderosa

Family: Pinaceae

Category: Tree

Comments: Comments: The yellow pine is typically found in dry, coastal areas and most commonly known for its use as a Christmas tree. It is one of two pines with long needles and prefers full sun and sandy soil that offers good drainage. These trees can be found in many different soil types and typically grows in groups, living as long as 400 to 500 years. The yellow pine is commonly used to make canoes and for different ointments.

AVOIDANCE

Weeds, Trees, Plants: Best course of action for sensitive individuals includes monitoring pollen counts during seasons of pollination, and avoiding warm, dry days during pollination seasons. Also during episodes of heightened pollen counts it is best to keep your air conditioner running and to try and limit open windows and doors for extended periods. If possible, replace air conditioning and vacuum filters with HEPA filters; these are intended to more efficiently absorb particulates. Be sure to research your particular allergen at your own convenience, so that an improved understanding may help you to better avoid it or remove it from your landscape.

Mites: Avoidance techniques include increased cleaning, keeping indoor humidity below 55%, removal of wall-to-wall carpets, and use of mite-proof mattress and pillow covers. If possible, replace air conditioning and vacuum filters with HEPA filters; these are intended to more efficiently absorb particulates. Everything in the bedroom should be washable, including window curtains, pillows, sheets and blankets (which should be synthetic). Replace rugs and carpets routinely.

Mold/Funguses: Because of the diversity of habitats in which different molds exist, or the ubiquity of some molds, a uniform avoidance procedure is hard to set forth. For individuals allergic to a singular mold whose existence is reliant on plants and foodstuffs, the best course of action is to reduce indoor plants, frequently remove spoiled produce, and avoid agro industrial zones, year-round if need be. For nearly all other funguses, the primary objective for diminishing your symptoms is by reducing indoor dampness. Also, be sure to clean frequently, which includes vacuuming and mopping with bleach infused water, maintaining a hygienic furnace, air conditioner, vaporizer, or dehumidifier, and removing old papers, carpeting, and furniture. It is often best to use mold-resistant paints – both in common dwelling areas and to finish crawl spaces, attics, and basements – and to add boric acid or borax to the paste if you are newly papering walls. Furthermore, it may be necessary to promptly dry damp clothes, and towels.

Pets: The avoidance techniques for those allergic to pets are split into those designated for individuals who own pets, and those for individuals who do not.

> *Pet Owners:* It is helpful for sensitive individuals to primarily keep pets off of furniture. Apart from this, it would be best to clean routinely, keep your pet outdoors as much as possible, and wash your hands frequently. If possible, replace air conditioning and vacuum filters with HEPA filters; these are intended to more efficiently absorb particulates.
>
> *Non-pet owners:* The best course of action is to identify which acquaintances of yours own pets. Monitor when pet owners visit and be sure to clean thoroughly after. Wash your hands immediately after coming in contact with the allergenic pet, and if possible avoid contact altogether.

Feathers: For those allergic, it is best to own synthetic bedding, sheets, and pillows. Also be sensitive to bedding when travelling. It may be necessary to replace down jackets and other outerwear.