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Molds

Alternaria tenuis

Occurs in soils, foods, clothing, corn silage, rotten wood, compost piles and bird nests. It is considered an outdoor mold and appears during warm weather. Several studies have reported cross reactivity with *A. alternata*, *Stemphyllium* and *Curvularia*.

Aspergillus fumigatus

Survives across a wide temperature range with a worldwide distribution. Found in soils, leaf and plant litter, decaying vegetables and roots, bird droppings, tobacco and stored sweet potatoes. Inhaling the conidia (seed) and mycelium of *A. fumigatus* may lead to several types of lung diseases, i.e. Farmer's Lung, Pigeon Breeder's Disease.

Aureobasidium (Pullularia) pullulans

Primarily known as an invader of leaves. Particularly active during the fall when it begins to decompose leaves. Also, found in the surface layers of soil, wheat seeds, barley, oats, tomatoes and pecans. It is often found in kitchens and bathrooms and is destructive to interior painted surfaces and caulking compounds.

Botrytis cinerea

Found mainly in humid, temperate and subtropical regions. Common in soil and causes blight or rot of leaves, flowers and fruits. We know it as the grey mold found on cabbage, lettuce, tomatoes, strawberries and grapes. 'Noble rot' used to flavor fine wines is caused by this mold.

Candida (monilia) albicans

This is a yeast that is common in soil and humans. It can cause thrush in infants and skin infections in diabetic patients. Believed by some to cause yeast infections and Athlete's Foot.

Curvularia spicifera

Causes leaf spots and blight on seedlings. We also see it on cotton, rice, barley, wheat and corn. *Curvularia* is also common in swamp coolers and onions. Cross reactivity with *Stemphyllium*, *Curvularia* and *Alternaria* has been reported.

Epicoccum nigrum

Is a secondary decomposer of plants, soil, paper and textiles. It leaves small black pustules on dead plants. It is found on cereals, fruits, polluted water, in compost piles, on insects, human skin and sputum. Its highest counts are during calm, dry weather. *Epicoccum* is the most common mold resulting in positive skin reactions in Missouri. Symptoms seem to increase in late summer and fall.

Fusarium

Is widely seen on grasses and is a common soil fungus. It is a major parasite of peas, cotton, rice, sugar cane, sorghum, corn, tomatoes and watermelon. It sporulates in warm, wet weather. *Fusarium* shares some cross reactivity with *Alternaria*, *Penicillium*, and *Aspergillus*.

Helminthosporium

This is the most frequently measured airborne mold worldwide. Indoor counts are typically the result of high outdoor counts. The conidia appears in the spring and peaks either late summer or early fall. This mold can be found in unclean refrigerators, on foods, on moist window frames and in low, damp areas. It has also been found in fuel tanks, face creams, paints, leather, rubber, wood products and textiles. Researchers using CIE/CRIE techniques identified around sixty preceptible antigens in this mold.

Hormodendrum

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Mucor racemosus

Mucor is primarily a soil fungus. It is also found in horse manure, grains, vegetables, nuts, soft fruit and in fruit juice. It is also the dominant mold found in house dust and is considered an indoor mold.

Penicillium notatum

Is common in forests and grasslands. Penicillium is found on cereals and hay. It is an important house mold and is the 'blue green' mold found on stale bread, fruits and nuts. It is also used for making green and blue mold cheese. Penicillium reaches its peak concentrations in the winter and spring. It is one of the molds most often producing skin reactions in allergic individuals. It is a potent immunopathogen for asthma. Mutated strains of P.notatum are used to make Penicillin and they do not cross react.

Rhizopus nigricans

Disperses its spore on hot, dry days. It is found in forests and cultivated soils, children's sandboxes, pine needles and leaves, sweet potatoes, cold-stored strawberries, stewed fruits, bird nests, feathers and wild bird droppings. Rhizopus is closely related to Mucor. Occupational exposure occurs most often among food handlers during storage, transfer and marketing of strawberries, peaches, cherries, corn and peanuts. It does grow readily on bread, cured meats and root vegetables left indoors.

Stemphyllium

Can be found in forests, grasslands, wheat plantings, beet and citrus cultivation and coffee plantations. It has also been isolated in polluted water, tree leaf litter, bark and citrus leaves, tomatoes, wheat and barley. It violently discharges its conidia during the day and when relative humidity drops. Along with Alternaria, Stemphyllium is considered one of the most antigenic molds in the US.

Trichoderma lignorum

Is ranked as one of the most widely distributed of all soil molds from the extreme north to tropical regions. It can grow on other fungi, fallen timber, tapestry, moist dwellings, unglazed kitchen ceramics, mushrooms and tulip bulbs. It grows rapidly on damp cotton and wool and may be found in damp basements.