Product: **332 - Insects (Whole Body), Ant, Black Carpenter Camponotus pennsylvanicus**

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Search Strategy

PubMed: Camponotus pennsylvanicus; Camponotus and allergy
Google: carpenter ant allergy; carpenter ant allergy adverse; carpenter ant allergen; carpenter ant allergen adverse; same search results performed for Camponotus pennsylvanicus

Nomenclature

Camponotus pennsylvanicus is the black carpenter ant, a member of the Hymenoptera order and Formicidae (ant) family. These do not appear to be stinging ants, but they do bite (http://insects.tamu.edu/fieldguide/cimg356.html, accessed 4 January 2007). There appears to be no evidence of these ants eliciting allergic reactions in humans.

Synonym: Camponotus pennsylvanica

Parent Product

332 - Insects (Whole Body), Ant, Black Carpenter Camponotus pennsylvanicus

Related Products

334 - Insects (Whole Body), Ant, Carpenter Camponotus pennsylvanica

Published Data

PMID 8291749 did not specify the ant species in RAST study
PMID 16450569 contained an in sole skin test study with a positive reaction to C. pennsylvanicus in 5% of 200 allergy/asthma patients in West Virginia.

Documents	PubMed Number	Author	Year Published
332_ All Asthma Proc 26-356.pdf	16450569	Smith, T.S.	2005
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	none	none
Therapy:	none	none

Product: 333 - Insects (Whole Body), Ant, Black Monomorium minimum

Manufacturers of this Product

Allermed Laboratories, Inc. - San Diego, CA (Lic. No. 467, STN No. 102211)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Monomorium minimum
ISI search: Monomorium minimum
Google: Monomorium minimum

Nomenclature

Monomorium minimum is the black ant, or small black ant (ITIS) a member of the Hymenoptera order and Formicidae (ant) family. These ants do not appear to be stinging ants, nor do they bite (http://taylor-tx.tamu.edu/publications/ManagingHouseholdAnts.pdf, accessed 4 January 2007). There appears to be no evidence of these ants eliciting allergic reactions in humans.

Synonym: none

Parent Product

333 - Insects (Whole Body), Ant, Black Monomorium minimum

Published Data

Type of allergy: Stinging/biting allergy
In PMID 8291749 the ant species used in the RAST study was not specified .

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	none	none
Therapy:	none	none

Product: **334 - Insects (Whole Body), Ant, Carpenter Camponotus pennsylvanica**

Manufacturers of this Product

Allermed Laboratories, Inc. - San Diego, CA (Lic. No. 467, STN No. 102211)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Camponotus pennsylvanica; Camponotus pennsylvanicus; Camponotus and allergy
Google: carpenter ant allergy; carpenter ant allergy adverse; carpenter ant allergen; carpenter ant allergen adverse; same search results performed for Camponotus pennsylvanica

Nomenclature

Camponotus pennsylvanica is the black carpenter ant, a member of the Hymenoptera order and Formicidae (ant) family. These ants do not appear to be stinging ants, but they do bite (http://insects.tamu.edu/fieldguide/cimg356.html, accessed 4 January 2007). There appears to be no evidence of these ants eliciting allergic reactions in humans.

Synonym: Camponotus pennsylvanicus

Parent Product

332 - Insects (Whole Body), Ant, Black Carpenter Camponotus pennsylvanicus

Related Products

334 - Insects (Whole Body), Ant, Carpenter Camponotus pennsylvanica

Published Data

Type of allergy: Stinging/biting allergy
In PMID 8291749 the ant species used in the RAST study was not specified);
PMID 16450569 contained an in sole skin test study with a positive reaction to C. pennsylvanicus (product 332) in 5% of 200 allergy/asthma patients in West Virginia.

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994
332_ All Asthma Proc 26-356.pdf	16450569	Smith, T.S.	2005

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	none	none
Therapy:	none	none

Product: **335 - Insects (Whole Body), Ant, Fire Solenopsis geminata**

Manufacturers of this Product

Hollister-Stier Labs, LLC - Spokane, WA (Lic. No. 1272, STN No. 103888)

Allermed Laboratories, Inc. - San Diego, CA (Lic. No. 467, STN No. 102211)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Solenopsis geminata
Google: fire ant allergy; fire ant allergy adverse; fire ant allergen; fire ant allergen adverse; same search results performed for Solenopsis geminata

Nomenclature

Solenopsis species are in the Hymenoptera order, belonging to the Formicidae family (www.itis.gov). There are more than 100 Solenopsis species listed in ITIS. S. richteri, S. invicta, and S. geminata are listed as accepted species in ITIS. There are no synonyms of S. geminate listed in ITIS. S. invicta is not listed as a synonym of S. geminate. S. wagneri is listed as an invalid synonym for S. invicta. Two subspecies are listed: S. geminate geminate and S. germinate micans.

Parent Product

335 - Insects (Whole Body), Ant, Fire Solenopsis geminata

Published Data

Type of allergy: Stinging/biting allergy
In the Panel I discussion, S. richteri and S. invicta are noted, not S. geminata. Solenopsis venom is distinct from other hymenoptera venoms, consisting predominantly of insoluble alkaloids.
PMID 239051: Prick and intradermal testing with whole body extracts appears to be effective; confirmed with Prausnitz-Kustner testing and RAST. Immunotherapy studies without controls were noted.
PMID 3170990: Skin testing with whole body extracts (S. invicta and S. richteri) are highly sensitive in children
PMID 2355158: venoms protein allergens of S. invicta and S. richteri were characterized
PMID 9389299: the venoms from all of the species of fire ants were examined (invicta, richteri, geminata, and xyloni) and appear to be highly cross-reactive.

Documents	PubMed Number	Author	Year Published
336_ JACI 56-84.pdf	239051	Rhoades, R.B.	1975
336_ JACI 82-419.pdf	3170990	Bahna, S.L.	1988
336_ JACI 100-679.pdf	9389299	Hoffman, D.R.	1997
336_ JACI 85-988.pdf	2355158	Hoffman, D.R.	1990

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **336 - Insects (Whole Body), Ant, Fire Solenopsis invicta**

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Hollister-Stier Labs, LLC - Spokane, WA (Lic. No. 1272, STN No. 103888)

ALK-Abello Inc. - Port Washington, NY (Lic. No. 1256, STN No. 103753)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Solenopsis invicta; Solenopsis invicta allergy
Google: fire ant allergy; fire ant allergy adverse; fire ant allergen; fire ant allergen adverse; same search results performed for Solenopsis invicta

Nomenclature

Solenopsis species are in the Hymenoptera order, belonging to the Formicidae family (www.itis.gov). There are more than 100 Solenopsis species listed in ITIS. S. richteri, S. invicta, and S. geminata are listed as accepted species in ITIS. S. wagneri is listed as an invalid synonym for S. invicta.

Parent Product

336 - Insects (Whole Body), Ant, Fire Solenopsis invicta

Published Data

Type of allergy: Stinging/biting allergy
PMID 3170990: Skin testing with whole body extracts (S. invicta and S. richteri) are highly sensitive in children
PMID 2355158: venoms protein allergens of S. invicta and S. richteri were characterized
PMID 9389299: the venoms from all of the species of fire ants were examined (invicta, richteri, geminata, and xyloni) and appear to be highly cross-reactive.

Documents	PubMed Number	Author	Year Published
336_ JACI 82-419.pdf	3170990	Bahna, S.L.	1988
336_ JACI 85-988.pdf	2355158	Hoffman, D.R.	1990
336_ JACI 100-679.pdf	9389299	Hoffman, D.R.	1997

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: 337 - Insects (Whole Body), Ant, Fire Solenopsis richteri

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Hollister-Stier Labs, LLC - Spokane, WA (Lic. No. 1272, STN No. 103888)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Solenopsis richteri; Solenopsis richteri allergy
Google: fire ant allergy; fire ant allergy adverse; fire ant allergen; fire ant allergen adverse; same search results performed for Solenopsis richteri

Nomenclature

Solenopsis species are in the Hymenoptera order, belonging to the Formicidae family (www.itis.gov). There are more than 100 Solenopsis species listed in ITIS. S. richteri, S. invicta, and S. geminata are listed as accepted species in ITIS. No synonyms are listed for S. richteri.

Parent Product

337 - Insects (Whole Body), Ant, Fire Solenopsis richteri

Published Data

Type of allergy: Stinging/biting allergy
PMID 3170990: Skin testing with whole body extracts (S. invicta and S. richteri) are highly sensitive in children
PMID 2355158: venoms protein allergens of S. invicta and S. richteri were characterized
PMID 9389299: the venoms from all of the species of fire ants were examined (invicta, richteri, geminata, and xyloni) and appear to be highly cross-reactive.

Documents	PubMed Number	Author	Year Published
336_ JACI 82-419.pdf	3170990	Bahna, S.L.	1988
336_ JACI 100-679.pdf	9389299	Hoffman, D.R.	1997
336_ JACI 85-988.pdf	2355158	Hoffman, D.R.	1990

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **338 - Insects (Whole Body), Ant, Red Formica spp**

Recommended Scientific Name Formica, (species to be specified)

Manufacturers of this Product

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Formica
Google: ant allergy; ant allergy adverse; ant allergen; ant allergen adverse

Nomenclature

ITIS listed 345 valid Formica species; PubMed Taxonomy lists 25 species. This listing does not specify the species.

Parent Product

338 - Insects (Whole Body), Ant, Red Formica spp

Published Data

No supportive data were identified.

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	none	none
Therapy:	none	none

Product: **339 - Insects (Whole Body), Ant, Red Monomorium pharaonis**

Recommended Common Name Ant, Pharaoh

Manufacturers of this Product

Allermed Laboratories, Inc. - San Diego, CA (Lic. No. 467, STN No. 102211)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Monomorium pharaonis
Google: red ant allergy; red ant allergy adverse; red ant allergen; red ant allergen adverse; same search results performed for Monomorium pharaonis

Nomenclature

According to ITIS, Monomorium pharaonis is the correct scientific name for this product. The common name is listed as 'pharaoh ant'. No synonyms are listed. The Monomorium genus is found in the Solenopsidini tribe.

Parent Product

339 - Insects (Whole Body), Ant, Red Monomorium pharaonis

Published Data

Type of allergy: Inhalant allergy
These ants do not sting and usually do not bite
Inhalant allergen is apparently significant in Korea (PMIDs. 15953858 and 15765749). Both series associated with positive bronchial provocations.

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994
339_ J Kor Med Sci 20-390.pdf	15953858	Kim, C.W.	2005
339_ Ann All 94-301.pdf	15765749	Kim, C.W.	2005

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	none	none
Therapy:	none	none

Product: **340 - Insects (Whole Body), Ant, Red Pogonomyrex rugosa**

Recommended Common Name Ant, Rough Harvester

Recommended Scientific Name Pogonomyrmex rugosus

Manufacturers of this Product

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Pogonomyrmex rugosus
Google: red ant allergy; red ant allergy adverse; red ant allergen; red ant allergen adverse; same search results performed for Pogonomyrmex rugosus

Nomenclature

According to ITIS, the common name is rough harvester ant, not red ant. No synonyms are listed. The Pogonomyrmex genus is a member of the Hymenoptera order and Formicidae (ant) family. Scientic name is misspelled, correct spelling is: Pogonomyrmex rugosus. Common name is 'rough harvester ant'.

Parent Product

340 - Insects (Whole Body), Ant, Red Pogonomyrex rugosa

Published Data

Type of allergy: Inhalant allergy
In PMID 64481 eight patients with sting allergy to Pogonomymrex sp, 1 to red ant. Positive skin test to whole body extracts and positive histamine release tests were reported. No challenges were performed.
In PMID 4854598, one subject (D.W.) had experienced wheezing and anaphylaxis following Pogonomymrex barbatus stings, and had a positive skin test to Pogonomymrex rugosus extract.

Documents	PubMed Number	Author	Year Published
340_ JACI 59-10.pdf	64481	Pinnas, J.L.	1977
340_ JACI 54-132.pdf	4854598	Lockey, R.F.	1974

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	none	none
Therapy:	none	none

Product: **341 - Insects (Whole Body), Bee, Honey Apis mellifera**

Manufacturers of this Product

ALK-Abello Inc. - Port Washington, NY (Lic. No. 1256, STN No. 103753)

Search Strategy

PubMed: Apis mellifera and allergy modifiers: all venom papers
Google: honey bee allergy; honey bee allergy adverse; honey bee allergen; honey bee allergen adverse; same search results performed for Apis mellifera

Nomenclature

According to ITIS, Apis mellifera and honey bee are the correct names. The Apis genus is found in the Apidae (bee) family and the Hymenoptera order.

Parent Product

341 - Insects (Whole Body), Bee, Honey Apis mellifera

Published Data

Type of allergy: Inhalant allergy
Honey bee venom allergy is well-described, and is neither diagnosed nor treated with whole body extracts (WBE). Panel I has an extensive discussion to this effect. However, for inhalant allergy to bee dust, Panel I cites a single paper: Ellis and Ahrens, Journal of Allergy, 3:247-252, 1932. According to the Panel I discussion (pg 3237), two cases were described. One case had inhalant allergy alone, the other case had inhalant allergy along with venom anaphylaxis. Both had positive skin test, passive transfer; one had a positive challenge with bee extract sprayed into the room. One also responded to immunotherapy.

No published data were found.

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **342 - Insects (Whole Body), Caddis Fly Phryganea spp**

Recommended Scientific Name Phryganea (species to be specified)

Manufacturers of this Product

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Search Strategy

PubMed: caddisflies; caddis plus allergy
Google: caddisflies allergy; caddisflies allergy adverse; caddisflies allergen; caddisflies allergen adverse; same search results performed for Phryganea

Nomenclature

According to ITIS, there are five species (P. atomaria, P. labefacta, P. miocenica, P. spokanensis, and P. wickhami) and three subgenera (Colpomera, Neophryganea, and Phryganea) listed within the Phryganea genus. The Phryganeinae genus is found in the Phryganeidae (large caddisflies) family and Phryganeoidea superfamily, and Tricoptera order. (www.itis.gov)

Parent Product

342 - Insects (Whole Body), Caddis Fly Phryganea spp

Published Data

Type of allergy: Inhalant allergy
Panel I discusses caddis flies at length (pgs 3236-3237) which are primarily present in the Great Lakes, especially along the Niagara River. Ten papers are cited (from 1929-1963) that support skin testing with passive transfer and conjunctival challenge. Uncontrolled immunotherapy studies - one with 57 patients - support efficacy and safety.

PMID 3294975 Asthmatics in Japan have a high prevalence of reactivitiy to Caddis Fly wing extract (but species is Macronema radiatum). This paper cannot be used to support efficacy since the correct genus and species was not tested.

PMID 8044233 A cross-sectional survey was conducted in a hydroelectric power plant in which the workforce was exposed to large numbers of caddis flies, Hydropsyche recurvata. 17 workers (61%) were skin prick positive to a laboratory prepared caddis fly antigen (LCFA) made from the remains of caddis flies present in the plant and 11 (39%) had positive reactions to a commercial caddis fly antigen (CCFA). Workers stationed in heavily exposed areas were 3.7 times as likely to have a positive response to the LCFA ($p = 0.009$) and 5.3 times as likely to have a positive response to the CCFA ($p = 0.036$). This paper cannot be used to support efficacy since the product tested was not a whole body extract.

PMID 2547857 investigated the possibility that subjects with IgE antibodies to an inhalant insect allergen, such as caddis fly, might also have antibodies to cross-reacting carbohydrate determinants (CCDs). IgE antibodies to cross-reacting allergens in caddis flies, mussels, oysters, shrimps, crabs, honeybee, and yellow jacket venoms were determined by RAST. RAST inhibition, and immunoblot studies with sera from three different sources: (1) sera of patients with well-defined inhalant atopy to caddis fly, (2) sera with IgE anti-CCD antibodies from subjects without known exposure to caddis fly, and (3) hyperimmune antisera with IgG ant CCD antibodies raised as a result of immunization of rabbits with grass-pollen extract, buckwheat glycoprotein, or with honeybee venom. Sera from groups 2 and 3 reacted with Sepharose-coupled caddis fly extract in a RAST-type assay and elicited virtually identical patterns on immunoblots of caddis fly extract separated on sodium dodecyl sulfate-polyacrylamide gel electrophoresis, whereas the sera from group 1 atopic patients did not react with CCD-rich material. However, indications for other types of cross-reacting antibodies were detected. The IgE antibodies of one of the patients studied (who was allergic not only to caddis fly but also to shellfish) were found to detect a cross-reacting homologous protein in extracts of mussel, oyster, shrimp, crab, honeybee, and yellow jacket venom. Preliminary results suggest that this cross-reacting 13 kd protein, the most prominent caddis fly allergen, is an invertebrate hemoglobin (erythrocruorin)-like molecule. These studies suggest the possibility that patients sensitized by exposure to caddis fly antigens could develop allergic reactions during their first exposure to shellfish or to their first bee sting. This paper cannot be used to support efficacy since the genus and species of caddis fly was not identified.

Documents	PubMed Number	Author	Year Published
342_ JACI 79-857.pdf	3294975	Kino, T.	1987
342_ JACI 84-174.pdf	2547857	Koshte, V.L.	1989
342_ Occ Env Med 51-408.pdf	8044233	Kraut, A.	1994

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **343 - Insects (Whole Body), Caddis Fly Trichoptera sp.**

Recommended Scientific Name Trichoptera (species to be specified)

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Search Strategy

PubMed: caddisflies; caddis plus allergy
Google: caddisflies allergy; caddisflies allergy adverse; caddisflies allergen; caddisflies allergen adverse; same search results performed for Trichoptera

Nomenclature

According to ITIS, Tricoptera is the order, under which there are 10 superfamies, 1 of which is Phryganeoidea. There are 3 families listed in the Phryganeoidea superfamily, 1 of which is Phryganeidae (large caddisflies). The Phryganeidae family contains 2 subfamilies, 1 of which is Phryganeinae. The Phryganeinae subfamily contains 15 genera, of which one is Phryganea. Within this genus there are 13 species: P. atomaria, P. labefacta, P. miocenica, P. spokanensis, P. wickhami, P. japonica, P. sinensis, P. cineria, P. sayi, P. bipunctata, P. grandis, P. nattereri and P. rotundata.

Parent Product

343 - Insects (Whole Body), Caddis Fly Trichoptera sp.

Published Data

Type of allergy: Inhalant allergy

Panel I discusses caddis flies at length (pgs 3236-3237) which are primarily present in the Great Lakes, especially along the Niagara River. Ten papers are cited (from 1929-1963) that support skin testing with passive transfer and conjunctival challenge. Uncontrolled immunotherapy studies - one with 57 patients - support efficacy and safety.

Current data: PMID 3294975: Asthmatics in Japan have a high prevalence of reactivitiy to Caddis Fly wing extract (but species is Macronema radiatum). This paper cannot be used to support efficacy since the correct genus and species was not tested.
PMID 8044233: A cross-sectional survey was conducted in a hydroelectric power plant in which the workforce was exposed to large numbers of caddis flies, Hydropsyche recurvata. 17 workers (61%) were skin prick positive to a laboratory prepared caddis fly antigen (LCFA) made from the remains of caddis flies present in the plant and 11 (39%) had positive reactions to a commercial caddis fly antigen (CCFA). Workers stationed in heavily exposed areas were 3.7 times as likely to have a positive response to the LCFA ($p = 0.009$) and 5.3 times as likely to have a positive response to the CCFA ($p = 0.036$). This paper cannot be used to support efficacy since the product tested was not a whole body extract.
PMID 2547857 investigated the possibility that subjects with IgE antibodies to an inhalant insect allergen, such as caddis fly, might also have antibodies to cross-reacting carbohydrate determinants (CCDs). IgE antibodies to cross-reacting allergens in caddis flies, mussels, oysters, shrimps, crabs, honeybee, and yellow jacket venoms were determined by RAST. RAST inhibition, and immunoblot studies with sera from three different sources: (1) sera of patients with well-defined inhalant atopy to caddis fly, (2) sera with IgE anti-CCD antibodies from subjects without known exposure to caddis fly, and (3) hyperimmune antisera with IgG ant CCD antibodies raised as a result of immunization of rabbits with grass-pollen extract, buckwheat glycoprotein, or with honeybee venom. Sera from groups 2 and 3 reacted with Sepharose-coupled caddis fly extract in a RAST-type assay and elicited virtually identical patterns on immunoblots of caddis fly extract separated on sodium dodecyl sulfate-polyacrylamide gel electrophoresis, whereas the sera from group 1 atopic patients did not react with CCD-rich material. However, indications for other types of cross-reacting antibodies were detected. The IgE antibodies of one of the patients studied (who was allergic not only to caddis fly but also to shellfish) were found to detect a cross-reacting homologous protein in extracts of mussel, oyster, shrimp, crab, honeybee, and yellow jacket venom. Preliminary results suggest that this cross-reacting 13 kd protein, the most prominent caddis fly allergen, is an invertebrate hemoglobin (erythrocruorin)-like molecule. These studies suggest the possibility that patients sensitized by exposure to caddis fly antigens could develop allergic reactions during their first exposure to shellfish or to their first bee sting. This paper cannot be used to support efficacy since the genus and species of caddis fly was not identified.

Documents	PubMed Number	Author	Year Published
342_ Occ Env Med 51-408.pdf	8044233	Kraut, A.	1994
342_ JACI 84-174.pdf	2547857	Koshte, V.L.	1989
342_ JACI 79-857.pdf	3294975	Kino, T.	1987

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **344 - Insects (Whole Body), Cockroach American Periplaneta americana**

Manufacturers of this Product

Antigen Laboratories, Inc. - Liberty, MO (Lic. No. 468, STN No. 102223)
Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)
Hollister-Stier Labs, LLC - Spokane, WA (Lic. No. 1272, STN No. 103888)
ALK-Abello Inc. - Port Washington, NY (Lic. No. 1256, STN No. 103753)
Allermed Laboratories, Inc. - San Diego, CA (Lic. No. 467, STN No. 102211)
Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)
Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Periplaneta australasiae; German cockroach and allergy; American cockroach and allergy; Oriental cockroach and allergy
Google: cockroach allergy; cockroach allergy adverse; cockroach allergen; cockroach allergen adverse; same search results performed for Periplaneta americana

Nomenclature

In ITIS, there are 4 species of the genus Periplaneta; two of them are P. americana and P. australasiae. The common name for P. Americana is 'American cockroach'. The scientific and common names are correct. Both genera - Periplaneta and Blata - are part of the Blattidae family. Blattella germanica is one of four species in the Blattella genus (note the spelling). Blattella, in contrast, is part of the Blattellidae family.

Parent Product

344 - Insects (Whole Body), Cockroach American Periplaneta americana

Published Data

Type of allergy: Inhalant allergy
PMID 12839327: Prevalent in prick skin test survey of Venezuelan allergy/asthma patients; no challenge data.
PMID 1707332: Monoclonal antibodies raised to P. americana allergen - P1 cross reacted with several other P. americana extracts, but not with German or Oriental cockroach extracts.
PMID 1750718: 46 atopic asthma patients were 60-70% reactive to German or American cockroach and about 50% to both. High reactivity to fecal extracts as well.
PMID 11994096: In vitro study that douments low and inconstant potency among German and American cockroach extracts.
PMID 2242929: Cross reactivity study using pooled anti-German cockroach serum and (1) RAST inhinbition and (2) immunoblot. Significant cross reactivity between German and Asian cockroach, appreciable between German and American and Oriental.
PMID 2045612: Sera from 17 asthma patients used to detect cross reactivity among German, American and Oriental cockroach. Unique and common allergens identified, esp a 45 kD band in all 3 extracts.

Documents	PubMed Number	Author	Year Published
344_ Ann Allergy 90-664.pdf	12839327	Sánchez-Borges, M.	2003
344_ Clin Exp Allergy 20-675.pdf	1707332	Wu, C.H.	1990
344_ Ann Allergy 67-573.pdf	1750718	Menon, P.	1991
344_ Clin Exp Allergy 32-721.pdf	11994096	Patterson, M.L.	2002
346_ IAAI 92-154.pdf	2242929	Helm, R.M.	1990
346_ JACI 87-1073.pdf	2045612	Kang, B.C.	1991

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIB	Category I

Product: **345 - Insects (Whole Body), Cockroach Australian Periplanata australasiae**

Manufacturers of this Product

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Periplaneta australasiae; German cockroach and allergy; American cockroach and allergy; Oriental cockroach and allergy
Google: cockroach allergy; cockroach allergy adverse; cockroach allergen; cockroach allergen adverse; same search results performed for Periplaneta australasiae

Nomenclature

In ITIS, there are 4 species of the genus Periplaneta; two of them are P. americana and P. australasiae. The common name for P. australasiae is 'Australian cockroach'. The scientific and common names are correct. Both genera - Periplaneta and Blata - are part of the Blattidae family. Blattella germanica is one of four species in the Blattella genus (note the spelling). Blattella, in contrast, is part of the Blattellidae family.

Parent Product

345 - Insects (Whole Body), Cockroach Australian Periplanata australasiae

Published Data

Type of allergy: Inhalant allergy
PMID 12839327: Prevalent in prick skin test survey of Venezuelan allergy/asthma patients; no challenge data

Documents	PubMed Number	Author	Year Published
344_ Ann Allergy 90-664.pdf	12839327	Sánchez-Borges, M.	2003

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	none	none
Therapy:	none	none

Product: **346 - Insects (Whole Body), Cockroach Blatella orientalis**

Recommended Common Name Cockroach, Oriental

Recommended Scientific Name Blatta orientalis

Manufacturers of this Product

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Periplaneta australasiae; German cockroach and allergy; American cockroach and allergy; Oriental cockroach and allergy
Google: cockroach allergy; cockroach allergy adverse; cockroach allergen; cockroach allergen adverse; same search results performed for Blatella orientalis

Nomenclature

In ITIS, the correct spelling of this product is Blatta orientalis. The common name is 'oriental cockroach'. The scientific and common names need to be updated. Both genera - Periplaneta and Blatta - are part of the Blattidae family. The Blatta genus is found in the Blattidae family.

Parent Product

346 - Insects (Whole Body), Cockroach Blatella orientalis

Published Data

Type of allergy: Inhalant allergy
(PMID 12839327) Prevalent in prick skin test survey of Venezuelan allergy/asthma patients; no challenge data.
(PMID 3394591) In asthma population in Spain, 22 of 61 exposed patients had positive skin test to German and/or Oriental cockroach (verses 3 of 89 non-exposed). 22/25 skin test positive patients had positive RAST.
(PMID 2242929) Cross reactivity study using pooled anti-German cockroach serum and (1) RAST inhinbition and (2) immunoblot. Significant cross reactivity between German and Asian cockroach, appreciable between German and American and Oriental.
(PMID 2045612) Sera from 17 asthma patients used to detect cross reactivity among German, American and Oriental cockroach. Unique and common allergens identified, especially a 45 kD band in all 3 extracts.

Documents	PubMed Number	Author	Year Published
344_ Ann Allergy 90-664.pdf	12839327	Sánchez-Borges, M.	2003
346_ Allergol et Immunopathol 16-105.pdf	3394591	Pola, J.	1988
346_ IAAI 92-154.pdf	2242929	Helm, R.M.	1990
346_ JACI 87-1073.pdf	2045612	Kang, B.C.	1991

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIB	Category I

Product: 347 - Insects (Whole Body), Cockroach German Blatella germanica

Recommended Scientific Name Blattella germanica

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Hollister-Stier Labs, LLC - Spokane, WA (Lic. No. 1272, STN No. 103888)

ALK-Abello Inc. - Port Washington, NY (Lic. No. 1256, STN No. 103753)

Allermed Laboratories, Inc. - San Diego, CA (Lic. No. 467, STN No. 102211)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Periplaneta australasiae; German cockroach and allergy; American cockroach and allergy; Oriental cockroach and allergy
Google: cockroach allergy; cockroach allergy adverse; cockroach allergen; cockroach allergen adverse; same search results performed for Blattella germanica

Nomenclature

In ITIS, the correct spelling of this product is Blattella germanica. The common name is 'German cockroach'. The scientific name is incorrect. The common name is correct. Both genera - Periplaneta and Blata - are part of the Blattidae family. Blattella germanica is one of four species in the Blattellidae family. Blattella, in contrast, is part of the Blattellidae family.

Parent Product

347 - Insects (Whole Body), Cockroach German Blatella germanica

Published Data

Type of allergy: Inhalant allergy
(PMID # 12839327) Prevalent in prick skin test survey of Venezuelan allergy/asthma patients; no challenge data.
(PMID # 1750718) 46 atopic asthma Patients were 60-70% reactive to German or American cockroach and about 50% to both. High reactivity to fecal extracts as well.
(PMID # 11994096) In vitro study that douments low and inconstant potency among German and American cockroach extracts.
(PMID # 16083793) NHANES III reported a positive prevalence of 26.1% to German cockroach extract
(PMID # 3394591) In asthma population in Spain, 22 of 61 exposed patients had positive skin test to German and/or Oriental cockroach (verses 3 of 89 non-exposed). 22 out of 25 skin test positive patients had positive RAST.
(PMID # 2242929) Cross reactivity study using pooled anti-German cockroach serum and (1) RAST inhinbition and (2) immunoblot. Significant cross reactivity between German and Asian cockroach, appreciable between German and American and Oriental.
(PMID # 2045612) Sera from 17 asthma patients used to detect cross reactivity among German, American and Oriental cockroach. Unique and common allergens identified, especially a 45 kD band in all 3 extracts.

Documents	PubMed Number	Author	Year Published
355_ IAAAI 85-278.pdf	3350607	Baldo, B.A.	1988
344_ Ann Allergy 90-664.pdf	12839327	Sánchez-Borges, M.	2003
344_ Ann Allergy 67-573.pdf	1750718	Menon, P.	1991
344_ Clin Exp Allergy 32-721.pdf	11994096	Patterson, M.L.	2002
344_ JACI 116-377.pdf	16083793	Arbes, S.J. Jr.	2005
346_ Allergol et Immunopathol 16-105.pdf	3394591	Pola, J.	1988
346_ IAAI 92-154.pdf	2242929	Helm, R.M.	1990
346_ JACI 87-1073.pdf	2045612	Kang, B.C.	1991

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIB	Category I

Product: **348 - Insects (Whole Body), Cricket Acheta assimilis**

Recommended Scientific Name Acheta domesticus

Manufacturers of this Product

Antigen Laboratories, Inc. - Liberty, MO (Lic. No. 468, STN No. 102223)

Search Strategy

PubMed: Acheta assimilis
ISI: Acheta assimilis
Google: cricket allergy; cricket allergy adverse; cricket allergen; cricket allergen adverse; same search results performed for Acheta assimilis

Nomenclature

According to ITIS, only one species of Acheta is listed: A. domesticus. There is no common name listed. Another cricket by the name of Gryllus assimilis is also listed. There is no common name listed for this cricket. The Acheta and Gryllus genera are found in the Gryllidae family.

Parent Product

348 - Insects (Whole Body), Cricket Acheta assimilis

Published Data

Panel I review (pg 3239): Crickets were reviewed along with many miscellaneous insects on which few studies exist. Cited studies for cricket: Hellreich (ref 95), about 10 of 30 patients with asthma were positive, the study did not include controls.
In PMID 8291749, cricket (Gryllidae) extracts are prepared and 50 allergic and nonallergic asthma patients are tested by RAST. 41 out of 50 allergic asthmatic patients were positive (verses 25 out of 50 nonallergic asthmatic patients). The titers were much higher in the allergic asthmatic group. [Gryllidae is the family, under which there are 7 subfamilies; gryllinae is the relevant subfamily, under which there are 7 genera.]
In PMID 7362095, single case report with positive skin test and conjunctival challenge, but genus and species was not indicated.

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994
349_ Ann Allergy 44-162.pdf	7362095	Harfi, H.A.	1980

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: 349 - Insects (Whole Body), Cricket Acheta domesticus

Manufacturers of this Product

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Acheta domesticus; Acheta domesticus and allergy modifiers; cricket and allergy
Google: Google: cricket allergy; cricket allergy adverse; cricket allergen; cricket allergen adverse; same search results performed for Acheta domesticus

Nomenclature

According to ITIS, only one species of Acheta is listed: A. domesticus. There is no common name listed. The Acheta genus is found in the Gryllidae family.

Parent Product

349 - Insects (Whole Body), Cricket Acheta domesticus

Published Data

In PMID # 8291749, cricket (Gryllidae) extracts are prepared and 50 allergic and nonallergic asthma patients are tested by RAST. 41 out of 50 allergic asthmatic patients were positive (verses 25 out of 50 nonallergic asthmatic patients). The titers were much higher in the allergic asthmatic group. [Gryllidae is the family, under which there are 7 subfamilies; gryllinae is the relevant subfamily, under which there are 7 genera.]

In PMID # 7362095, single case report with positive skin test and conjunctival challenge, but genus and species was not indicated

In PMID # 6153085, two cases of asthma and allergic rhinitis in occupational exposure to crickets. Positive skin test, RAST, bronchial challenge, in vitro histamine release, passive transfer. Some of the 11 exposed but asymptomatic coworkers were also had positive skin test and RAST. Species listed was A. domesticus.

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994
349_ Ann Allergy 44-162.pdf	7362095	Harfi, H.A.	1980
349_ JACI 65-71.pdf	6153085	Bagenstose, A.H. 3rd	1980

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: **350 - Insects (Whole Body), Deer Fly Chrysops sp.**

Recommended Scientific Name Chrysops, (species to be specified)

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Search Strategy

PubMed: Chrysops and allergy
Google: Chrysops and allergy

Nomenclature

ITIS lists greater than 80 Chrysops species.

Parent Product

350 - Insects (Whole Body), Deer Fly Chrysops sp.

Published Data

Abstract for Ann Allergy Asthma Immunol. 2003 Mar;90(3):351-4 (not retrieved) concluded that skin test to whole body extracts is unreliable.

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **351 - Insects (Whole Body), Flea Ctenocephalis canis**

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Search Strategy

PubMed: Ctenocephalides canis; Flea plus allergy
Google: flea allergy; flea allergy adverse; flea allergen; flea allergen adverse; same search results performed for Ctenocephalides canis

Nomenclature

According to ITIS, fleas are found in the order Siphonaptera. There are seven families within this order. The genus, Ctenocephalis is not listed in ITIS, neither are the common names of canine or dog flea.

Parent Product

351 - Insects (Whole Body), Flea Ctenocephalis canis

Published Data

Type of allergy: Biting allergy
Panel I review: In the discussion on pages 3234-5, reference 932 is a skin testing study for cat flea; it was also cited as a negative study for immunotherapy. Other immunotherapy studies (not retrieved here) supported immunotherapy, but not conclusively, with a dog flea and mixed flea extract, respectively (references 48 and 49, pg 3234).

Note 1: In all studies, C. felis is the more common isolate (>90%) from both dogs and cats, than C. canis.
Note 2: All fleas can transmit zoonoses (Bartonella, Rickettsia). Flea extracts for human injection should be verified to be from pathogen-free sources.

Flea bite was implicated in papular urticaria (PU), although most PU patients were skin test negative. Whole body extracts of Ctenocephalides felis felis (cat flea) and Ctenocephalides canis (dog flea) were tested in this publication (PMID # 15104197).

Documents	PubMed Number	Author	Year Published
352_ Annals Allergy 92-446.pdf	15104197	García, E.	2004

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIA	none

Product: **352 - Insects (Whole Body), Flea Ctenocephalis felis**

Recommended Scientific Name Ctenocephalis, (species to be specified)

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Search Strategy

PubMed: Ctenocephalides felis; Flea plus allergy
Google: flea allergy; flea allergy adverse; flea allergen; flea allergen adverse; same search results performed for Ctenocephalides felis

Nomenclature

According to ITIS, fleas are found in the order Siphonaptera. There are seven families within this order. The genus, Ctenocephalis is not listed in ITIS, neither are the common names of canine or dog flea.

Parent Product

352 - Insects (Whole Body), Flea Ctenocephalis felis

Published Data

Type of allergy: Biting allergy
Panel I review: In the discussion on pages 3234-5, reference 932 is a skin testing study for cat flea; it was also cited as a negative study for immunotherapy. Other immunotherapy studies (not retrieved here) supported immunotherapy, but not conclusively, with a dog flea and mixed flea extract, respectively (references 48 and 49, pg 3234).

Note 1: In all studies, C. felis is the more common isolate (>90%) from both dogs and cats, than C. canis.
Note 2: All fleas can transmit zoonoses (Bartonella, Rickettsia). Flea extracts for human injection should be verified to be from pathogen-free sources.

Specific IgE to cat flea detected (PMID 3592140); flea bites were implicated in papular urticaria (PU), although most PU patients were skin test negative (PMID 15104197); specific IgE-binding bands noted at 34, 35, 39, 54 and 60 kD (PMID 8334536); PMID # 11074254 reports the cloning of recombinant Cte f 1, a major allergen in flea allergy dermatitis (FAD) in dogs and cats.

Documents	PubMed Number	Author	Year Published
352_ Allergy 42-177.pdf	3592140	Rolfsen, W.	1987
352_ Annals Allergy 19-1275.pdf	13892062	Feingold, B.F.	1961
352_ Annals Allergy 92-446.pdf	15104197	García, E.	2004
352_ CEA 23-377.pdf	8334536	Trudeau, W.L.	1993
352_ Exp Parasitol 13-143.pdf	13970527	Benjamini, E.	1963
352_ Exper Parasitol 9-264.pdf	14403741	Hudson, B.W.	1960
352_ Mol Immunol 37-361.pdf	11074254	McDermott, M.J.	2000

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIA	none

Product: **353 - Insects (Whole Body), Horse Fly Hybomitra spp**

Recommended Scientific Name Hybomitra, (species to be specified)

Manufacturers of this Product

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: horsefly plus allergy modifiers; hybomitra plus allergy; tabanus plus allergy
Google: horsefly allergy; horsefly allergy adverse; horsefly allergen; horsefly allergen adverse; same search results performed for Hybomitra

Nomenclature

ITIS lists more than 100 Tabanus spp. and about 75 Hybomitra spp. Both genera are members of the Tabanini subfamily.

Parent Product

353 - Insects (Whole Body), Horse Fly Hybomitra spp

Published Data

Type of allergy: Biting allergy
No supportive data were identified.

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIB	none
Therapy:	Category IIIB	none

Product: 354 - Insects (Whole Body), Horse Fly Tabanus spp

Recommended Scientific Name Tabanus, (species to be specified)

Manufacturers of this Product

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: horsefly plus allergy modifiers; hybomitra plus allergy; tabanus plus allergy
Google: horsefly allergy; horsefly allergy adverse; horsefly allergen; horsefly allergen adverse; same search results performed for Tabanus

Nomenclature

ITIS lists more than 100 Tabanus spp. and about 75 Hybomitra spp. Both genera are members of the Tabanini subfamily.

Parent Product

354 - Insects (Whole Body), Horse Fly Tabanus spp

Published Data

Type of allergy: Biting allergy
No supportive data were identified.

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIB	none
Therapy:	Category IIIB	none

Product: 355 - Insects (Whole Body), House Fly Musca domestica

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: Musca domestica plus allergy modifiers
Google: house fly allergy; house fly allergy adverse; house fly allergen; house fly allergen adverse; same search results performec for Musca domestica

Nomenclature

According to ITIS, the scientific name is Musca domestica,. The common name is house fly. The scientific and common names are correct and current. Listed synonyms are: M. contigua, M. harpyia, M. vicina. Two subspecies are listed for M. domestica: domestica and vicina. The Musca genus is found in the Muscini tribe, Muscinae subfamily, and Muscidae family.

Parent Product

355 - Insects (Whole Body), House Fly Musca domestica

Published Data

Type of allergy: Inhalant allergy

Panel I cites a 1938 paper by Jamieson (pg 3241, ref 83) about an inhalant allergy to house fly in a single patient, supported by skin tests (with wings), passive transfer, and challenges (nasal/conjunctival, pg 3238).

Positive RASTs to housefly in asthmatics (PMID 8291749) and positive skin test to housefly in 19.75% of allergic children (PMID 16450569). Identified cross-reacting tropomyosin in housefly, spider (Tegenaria spp), and moth (Ephestia spp) (PMID 9208048). A case report with no skin test but included positive RAST and challenge testing (PMID 9105537); many patients with indoor allergy had positive RAST and specific immunoblots to bands in housefly extract (PMID 3350607); case report with positive skin test, positive RAST, positive RAST inhibition (PMID 4067132).

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994
332_ All Asthma Proc 26-356.pdf	16450569	Smith, T.S.	2005
355_ Allergol Immunopathol 25-118.pdf	9208048	Martínez, A.	1997
355_ Allergy 52-236.pdf	9105537	Wahl, R.	1997
355_ IAAAI 85-278.pdf	3350607	Baldo, B.A.	1988
355_ JACI 76-826.pdf	4067132	Tee, R.D.	1985

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	none
Therapy:	Category IIIB	none

Product: **356 - Insects (Whole Body), Kissing Bugs, Triatoma spp**

Recommended Scientific Name Triatoma, (species to be specified)

Manufacturers of this Product

Hollister-Stier Labs, LLC - Spokane, WA (Lic. No. 1272, STN No. 103888)

Search Strategy

PubMed: triatoma and allergy
Google: kissing bugs allergy; kissing bugs allergy adverse; kissing bugs allergen; kissing bugs allergen adverse; same search results performed for Triatoma

Nomenclature

According to ITIS, there are 11 species within the Triatoma genus; according to Ann Allergy 91-122, 6 are common in the US. One of these is T. protracta.

Parent Product

356 - Insects (Whole Body), Kissing Bugs, Triatoma spp

Published Data

Type of allergy: Biting allergy.

Panel I review: According to the discussion (pg 3236) kissing bug is Triatoma protracta. Cited reports include local reactions and anaphylaxis. Skin tests are useful for diagnosis. No supportive data were identified.

Furthermore, Triatoma are a reservoir for T. cruzii (the etiologic agent of Chagas disease). This is extremely rare in the US, but may be a safety issue for the whole body extracts.

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **357 - Insects (Whole Body), Leafhopper Cicadellidae**

Recommended Scientific Name Cicadellidae, (species to be specified)

Manufacturers of this Product

Antigen Laboratories, Inc. - Liberty, MO (Lic. No. 468, STN No. 102223)

Search Strategy

PubMed: leafhopper and allergy; Cicadellidae and allergy
Google: leafhopper allergy; leafhopper allergy adverse; leafhopper allergen; leafhopper allergen adverse; same search results performed for Cicadellidae

Nomenclature

According to ITIS, there are 26 genera under the family Cicadellidae and include "cicadellids, jassids, leafhoppers, sharpshooters"

Parent Product

357 - Insects (Whole Body), Leafhopper Cicadellidae

Published Data

Type of allergy: Inhalant allergy

Panel I review: Leafhopper is discussed briefly on pg 3239 as one of several insects eliciting a positive skin test reaction in a 1958 study by Perlman (PMID 13563064; see also PMID 13734429). However, specific data were not given for each extract, nor was there challenge or passive transfer data.

There are no known published data.

Documents	PubMed Number	Author	Year Published
357_ J Allergy 29-302.pdf	13563064	Perlman, F.	1958
357_ J Allergy 32-93.pdf	13734429	Perlman, F.	1961

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: **358 - Insects (Whole Body), Mayfly Ephemerida sp.**

Recommended Scientific Name (genus and species to be specified)

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: mayfly and allergy; Ephemerida and allergy; Hexagenia and allergy
Google: mayfly allergy; mayfly allergy adverse; mayfly allergen; mayfly allergen adverse; same search results performed for Ephemerida and Hexagenia

Nomenclature

According to ITIS, Ephemeridae is the family name. The Ephemeridae family includes 3 genera: Ephemera, Hexagenia, and Litobrancha. There are 6 species in Ephemera, 7 species in Hexagenia, and 1 species in Litobrancha.

Parent Product

358 - Insects (Whole Body), Mayfly Ephemerida sp.

Published Data

Published data: Type of allergy: Inhalant allergy

Panel I review: The discussion (pg 3237) cites 2 studies, Figley 1940 (ref 73, not retrieved, skin tests, passive transfer, and immunotherapy; inhalation testing) and Parlato 1938 (ref 74, not retrieved, skin tests and passive transfer tests).

PMID 16450569: A West Virginia allergy practice using Greer extracts, reported that 200 subjects were skin tested positive for Caddis fly (Trichoptera) 13.5%; Ant (C. pennsylvanica) 5%; House fly (Musca domestica) 18%; moth (Heterocera) 7%; mayfly (Ephemeroptera) 18.5%. Note by the order that Ephemeroptera is even less specific.

Documents	PubMed Number	Author	Year Published
332_ All Asthma Proc 26-356.pdf	16450569	Smith, T.S.	2005

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **359 - Insects (Whole Body), Mayfly Hexagenia spp**

Recommended Scientific Name Hexagenia, (species to be specified)

Manufacturers of this Product

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Search Strategy

PubMed: mayfly and allergy; Ephemerida and allergy; Hexagenia and allergy
Google: mayfly allergy; mayfly allergy adverse; mayfly allergen; mayfly allergen adverse; same search results performed for Ephemerida and Hexagenia

Nomenclature

According to ITIS, the genus Hexagenia includes 7 species. The scientific and common names need to be updated. The Hexagenia genus is found in the Ephemeridae family.

Parent Product

359 - Insects (Whole Body), Mayfly Hexagenia spp

Published Data

Type of allergy: Inhalant allergy

Panel I review: The discussion (pg 3237) cites 2 studies, Figley 1940 (ref 73, not retrieved, skin tests, passive transfer, and immunotherapy; inhalation testing) and Parlato 1938 (ref 74, not retrieved, skin tests and passive transfer tests).

PMID 16450569: West Virginia allergy practice using Greer extracts, 200 subjects were skin tested positive for Caddis fly (Trichoptera) 13.5%; Ant (C. pennsylvanica) 5%; House fly (Musca domestica) 18%; moth (Heterocera) 7%; mayfly (Ephemeroptera) 18.5%. Note by the order that Ephemeroptera is even less specific.

Documents	PubMed Number	Author	Year Published
332_ All Asthma Proc 26-356.pdf	16450569	Smith, T.S.	2005

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category I	Category I
Therapy:	Category IIIA	Category I

Product: **360 - Insects (Whole Body), Mosquito Aedes sp.**

Recommended Scientific Name Aedes, (species to be specified)

Manufacturers of this Product

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: mosquito and allergy and skin tests
Google: mosquito allergy; mosquito allergy adverse; mosquito allergen; mosquito allergen adverse; same search results performed for Aedes

Nomenclature

According to ITIS, there are more than 80 species of Aedes. The Aedes genus is in the Culicini tribe, Culcinae subfamily, and Culicidae family.

Parent Product

360 - Insects (Whole Body), Mosquito Aedes sp.

Published Data

Type of allergy: Biting allergy

Panel I cites four studies: Rockwell (1952, ref 50), two by Benson (1936 and 1939, refs 51 and 52), and Brown (1938, ref 54). Rockwell used Aedes aegypti, Benson used Aedes vexans, Brown did not specify which species was used in the text. The conclusions (pg 3235) "Mosquito extracts…may have some value in confirming…delayed local reactions…An IgE pathogenesis for this type of reaction has not been established…There is no clear documentation that mosquito extracts are effective in the treatment of this type of reaction."

PMID 14676078: Associated with CD4+ response in patients with EBV-associated disease. NOTE that this is the only paper that mentions Anopheles mosquitos, and all reactions were negative.
PMID 8933775: Skin test positive to multiple commercial preparations from Aedes aegypti, Culex pipiens, Aedes sp, Aedes taeniorhynchus, and lab prep from A. aegypti. IgG and IgE binding proteins were detected from saliva.
PMID 7719881: 2 patients with anaphylactic reactions to mosquito. One to A. aegypti alone, the other to A. aegypti and C. pipiens. Rush immunotherapy to A. aegypti alone worked, but A. aegypti and C. pipiens rush immunotherapy failed to reach therapeutic doses due to anaphylaxis on multiple attempts.
PMID 6026352: Skin test and passive transfer tests were performed in 2 patients and 5 controls (recipients for passive transfer testing). Extracts were prepared from male, female, and pupae of Culex pipiens molestus. Pupae were barely potent.
PMID 5349688: Children with papular urticaria associated with Culex pipiens molestus bite tested, and several treated. Skin test positive responses (to prick and intradermal) correlated with papular urticaria. Controls were largely negative. Immunotherapy with A. aegypti commercial extract moderately effective. No controls were used for immunotherapy.
PMID 15180354: 20 subjects treated with Aedes communis extract, with improved symptom scores and nasal challenges. 10 untreated controls had no improvement.

Documents	PubMed Number	Author	Year Published
361_ Arch Dermatol 139-1601.pdf	14676078	Asada, H.	2003
361_ Ann Allergy 77-371.pdf	8933775	Peng, Z.	1996
361_ Ann Allergy 74-39.pdf	7719881	McCormack, D.R.	1995
361_ IAA 31-274.pdf	6026352	Gold, D.	1967
361_ IAA 36-408.pdf	5349688	Tager, A.	1969
361_ Eur Ann Allergy Clin Immunol 36-131.pdf	15180354	Ariano, R.	2004

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: **361 - Insects (Whole Body), Mosquito Aedes taeniorhynchus**

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Search Strategy

PubMed: mosquito and allergy and skin tests
Google: mosquito allergy; mosquito allergy adverse; mosquito allergen; mosquito allergen adverse; same search results performed for Aedes taeniorhynchus

Nomenclature

According to ITIS, Aedes taeniorhynchus is the correct scientific name. There are no common names listed. Culex damnosus and C. taeniorhynchus are listed as synonyms. The Aedes genus is in the Culicini tribe, Culcinae subfamily, and Culicidae family.

Parent Product

361 - Insects (Whole Body), Mosquito Aedes taeniorhynchus

Published Data

Type of allergy: Biting allergy

Panel I cites four studies: Rockwell (1952, ref 50), two by Benson (1936 and 1939, refs 51 and 52), and Brown (1938, ref 54). Rockwell used Aedes aegypti, Benson used Aedes vexans, Brown did not specify which species was used in the text. The conclusions (pg 3235) "Mosquito extracts…may have some value in confirming…delayed local reactions…An IgE pathogenesis for this type of reaction has not been established…There is no clear documentation that mosquito extracts are effective in the treatment of this type of reaction."

PMID 14676078: Associated with CD4+ response in patients with EBV-associated disease. NOTE that this is the only paper that mentions Anopheles mosquitos, and all reactions were negative.
PMID 8933775: Skin test positive to multiple commercial preparations from Aedes aegypti, Culex pipiens, Aedes sp, Aedes taeniorhynchus, and lab prep from A. aegypti. IgG and IgE binding proteins were detected from saliva.
PMID 7719881: 2 patients with anaphylactic reactions to mosquito. One to A. aegypti alone, the other to A. aegypti and C. pipiens. Rush immunotherapy to A. aegypti alone worked, but A. aegypti and C. pipiens rush immunotherapy failed to reach therapeutic doses due to anaphylaxis on multiple attempts.
PMID 6026352: Skin test and passive transfer tests were performed in 2 patients and 5 controls (recipients for passive transfer testing). Extracts were prepared from male, female, and pupae of Culex pipiens molestus. Pupae were barely potent.
PMID 5349688: Children with papular urticaria associated with Culex pipiens molestus bite tested, and several treated. Skin test positive responses (to prick and intradermal) correlated with papular urticaria. Controls were largely negative. Immunotherapy with A. aegypti commercial extract moderately effective. No controls were used for immunotherapy.
PMID 15180354: 20 subjects treated with Aedes communis extract, with improved symptom scores and nasal challenges. 10 untreated controls had no improvement.

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361_ Eur Ann Allergy Clin Immunol 36-131.pdf	15180354	Ariano, R.	2004

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: **362 - Insects (Whole Body), Mosquito Anopheles sp.**

Recommended Scientific Name Anopheles, (species to be specified)

Manufacturers of this Product

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: mosquito and allergy and skin tests
Google: mosquito allergy; mosquito allergy adverse; mosquito allergen; mosquito allergen adverse; same search results performed for Anopheles

Nomenclature

According to ITIS, there are over 90 species of Anopheles listed. The Anopheles genus is found in the Anophelinae subfamily, and Culicidae family.

Parent Product

362 - Insects (Whole Body), Mosquito Anopheles sp.

Published Data

Type of allergy: Biting allergy

Panel 1 cites four studies: Rockwell (1952, ref 50), two by Benson (1936 and 1939, refs 51 and 52), and Brown (1938, ref 54). Rockwell used Aedes aegypti, Benson used Aedes vexans, Brown did not specify which species was used in the text. The conclusions (pg 3235) "Mosquito extracts…may have some value in confirming…delayed local reactions…An IgE pathogenesis for this type of reaction has not been established…There is no clear documentation that mosquito extracts are effective in the treatment of this type of reaction."

PMID 14676078: Associated with CD4+ response in patients with EBV-associated disease. NOTE that this is the only paper that mentions Anopheles mosquitos, and all reactions were negative.
PMID 7719881: 2 patients with anaphylactic reactions to mosquito. One to A. aegypti alone, the other to A. aegypti and C. pipiens. Rush immunotherapy to A. aegypti alone worked, but A. aegypti and C. pipiens rush immunotherapy failed to reach therapeutic doses due to anaphylaxis on multiple attempts.
PMID 6026352: Skin test and passive transfer tests were performed in 2 patients and 5 controls (recipients for passive transfer testing). Extracts were prepared from male, female, and pupae of Culex pipiens molestus. Pupae were barely potent.
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361_ IAA 36-408.pdf	5349688	Tager, A.	1969
361_ Eur Ann Allergy Clin Immunol 36-131.pdf	15180354	Ariano, R.	2004

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: **363 - Insects (Whole Body), Mosquito Culex sp.**

Recommended Scientific Name Culex, (species to be specified)

Manufacturers of this Product

ALK-Abello Inc. - Port Washington, NY (Lic. No. 1256, STN No. 103753)

Nelco Laboratories, Inc. - Deer Park, NY (Lic. No. 459, STN No. 102192)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: mosquito and allergy and skin tests
Google: mosquito allergy; mosquito allergy adverse; mosquito allergen; mosquito allergen adverse; same search results performed for Culex

Nomenclature

According to ITIS, there are over 40 species within the Culex genus. The Culex genus is found in the Culicini tribe, Culicinae subfamily, and Culicidae family.

Parent Product

363 - Insects (Whole Body), Mosquito Culex sp.

Published Data

Type of allergy: Biting allergy

Panel I cites four studies: Rockwell (1952, ref 50), two by Benson (1936 and 1939, refs 51 and 52), and Brown (1938, ref 54). Rockwell used Aedes aegypti, Benson used Aedes vexans, Brown did not specify which species was used in the text. The conclusions (pg 3235) "Mosquito extracts…may have some value in confirming…delayed local reactions…An IgE pathogenesis for this type of reaction has not been established…There is no clear documentation that mosquito extracts are effective in the treatment of this type of reaction."

PMID 14676078: Associated with CD4+ response in patients with EBV-associated disease. NOTE that this is the only paper that mentions Anopheles mosquitos, and all reactions were negative.
PMID 7719881: 2 patients with anaphylactic reactions to mosquito. One to A. aegypti alone, the other to A. aegypti and C. pipiens. Rush immunotherapy to A. aegypti alone worked, but A. aegypti and C. pipiens rush immunotherapy failed to reach therapeutic doses due to anaphylaxis on multiple attempts.
PMID 6026352: Skin test and passive transfer tests were performed in 2 patients and 5 controls (recipients for passive transfer testing). Extracts were prepared from male, female, and pupae of Culex pipiens molestus. Pupae were barely potent.
PMID 5349688: Children with papular urticaria associated with Culex pipiens molestus bite tested, and several treated. Skin test positive responses (to prick and intradermal) correlated with papular urticaria. Controls were largely negative. Immunotherapy with A. aegypti commercial extract moderately effective. No controls were used for immunotherapy.
PMID 15180354: 20 subjects treated with Aedes communis extract, with improved symptom scores and nasal challenges. 10 untreated controls had no improvement.

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361_ IAA 36-408.pdf	5349688	Tager, A.	1969
361_ Eur Ann Allergy Clin Immunol 36-131.pdf	15180354	Ariano, R.	2004

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: **364 - Insects (Whole Body), Moth Frenatae**

Recommended Scientific Name Frenatae, (species to be specified)

Manufacturers of this Product

Antigen Laboratories, Inc. - Liberty, MO (Lic. No. 468, STN No. 102223)

Allergy Laboratories, Inc. - Oklahoma City, OK (Lic. No. 103, STN No. 101376)

Search Strategy

PubMed: moth and allergy; Lepidoptera cells, moth, caterpillar, dermatitis
Google: moth allergy; moth allergy adverse; moth allergen; moth allergen adverse; same search results performed for Frenatae

Nomenclature

Heterocera appears to be an incorrect genus designation, absent from NCBI's taxonomy database and from ITIS. Elsewhere, a division of Lepidoptera, includes moths. Frenatae is absent from NCBI's taxonomy database. In ITIS, Frenatae is an invalid synonym for Lepidoptera.

Under the Order - Lepidoptera there are 34 superfamilies.

Parent Product

364 - Insects (Whole Body), Moth Frenatae

Published Data

Type of allergy: Inhalant allergy

Panel I discusses moths under order Lepidoptera (pg 3237). One skin test study is cited on a single individual along with 2 controls.

PMID 8291749 and 16450569 refer to "moths" or "Lepidoptera", no detail below the "order" level. Other articles retrieved - but discarded - were far more specific than the designations in these two moth extracts: studies with Pseudaletia unipuncta and Faronta diffusa (JACI 82-47); Lymantria dispar (J Occ Med 24-659); Galleria mellonella (Allergy 39-274); and Euxoa auxiliaris (Clin Allergy 11-55). Another study, also discarded, used an invalid or obscure name for the moths studied (Ephestia kuehniella in Allergy 56-696). Finally, J Allergy 44-51 examined Psychoda species; these are not members of the order Lepidoptera.

Documents	PubMed Number	Author	Year Published
332_ Ann All 72-45.pdf	8291749	Lierl, M.B.	1994
332_ All Asthma Proc 26-356.pdf	16450569	Smith, T.S.	2005

Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none

Product: **365 - Insects (Whole Body), Moth Heterocera**

Recommended Scientific Name Lepidoptera, (species to be specified)

Manufacturers of this Product

Greer Laboratories, Inc. - Lenoir, NC (Lic. No. 308, STN No. 101833)

Search Strategy

PubMed: moth and allergy; Lepidoptera cells, moth, caterpillar, dermatitis
Google: moth allergy; moth allergy adverse; moth allergen; moth allergen adverse; same search results performed for Heterocera

Nomenclature

Heterocera appears to be an incorrect genus designation, absent from NCBI's taxonomy database and from ITIS. Elsewhere, a division of Lepidoptera, includes moths. Frenatae is absent from NCBI's taxonomy database. In ITIS, Frenatae is an invalid synonym for Lepidoptera. Under the Order - Lepidoptera there are 34 superfamilies.

Parent Product

365 - Insects (Whole Body), Moth Heterocera

Published Data

Type of allergy: Inhalant allergy

Panel I discusses moths under order Lepidoptera (pg 3237) One skin test study is cited on a single individual along with two controls.

PMID 8291749 and 16450569 refer to "moths" or "Lepidoptera", no detail below the "order" level. Other articles retrieved - but discarded - were far more specific than the designations in these two moth extracts: studies with Pseudaletia unipuncta and Faronta diffusa (JACI 82-47); Lymantria dispar (J Occ Med 24-659); Galleria mellonella (Allergy 39-274); and Euxoa auxiliaris (Clin Allergy 11-55). Another study, also discarded, used an invalid or obscure name for the moths studied (Ephestia kuehniella in Allergy 56-696). Finally, J Allergy 44-51 examined Psychoda species; these are not members of the order Lepidoptera.

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Panels:

	Original Panel Recommendation	Reclassification Panel Recommendation
Diagnosis:	Category IIIA	none
Therapy:	Category IIIB	none