

# Uczulenia na owady (cz. III)

A L E R G E N Y

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## Hypersensitivity to insects Part III

### S U M M A R Y

The third part of the study is a finalization of the fragment published in the "Allergy" 4/2006. Following Table 2 information on both of allergens of the mosquitoes saliva as and of her other biologically active components was completed. Also data about cross- reactions between species and genera of these insects was introduced.

The information about allergen sources and / allergens of Diptera and other selected chosen not hymenopteral representatives was richly presented. Editionally detailed information concerning insects' preferences and their existence was picked out in such a way as to be used in medical practice. Above information relate to mosquitoes also to mayflies, caddisflies and exemplary selected butterflies representatives The whole is complemented by comprehensively selected references.

Przedstawiana trzecia część opracowania jest dokończeniem fragmentu części publikowanej Alergii 4/2006. W dalszym fragmencie tabeli 2 zakończono informacje na temat zarówno alergenów komarzej śliny jak i jej innych biologicznie czynnych składników. Przedstawiono również dane o reakcjach krzyżowych między gatunkami i rodzajami tych owadów. Bogato zaprezentowano informacje o źródłach alergenowych i / lub alergenach pozostałych muchówek oraz innych wybranych przedstawicieli niebłonkoskrzydłych. Szczegółowe informacje dotyczące upodobań i miejsc bytowania zarówno w odniesieniu do komarów jak i jątków, chruścików i przykładowo zaprezentowanego przedstawicieli motyli dobrano tak by mogły być wykorzystane w praktyce medycznej. Całość dopełnia bogate i wszechstronne dobrane piśmienictwo.

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**Tabela 2 (cd.)** Alergogenne i ogólnobiologiczne własności wybranych przedstawicieli owadów niebłonkoskrzydłych spośród uczulających ludzi w środowisku zewnętrz domowym lub odpowiadającym mu środowisku pracy.

Rząd	Rodzina	Rodzaj (gatunek)	Źródło alergenu, alergen (y)	Upodobania, miejsca bytowania
Cd. DIPTERA (muchówki)	Cd. Culicidae (komarowate)	Cd. <i>Anopheles</i> spp. 2 gatunki; w Europie najpopularniej-sze gatunki pochodzą z rodzajów <i>Aedes</i> spp. i <i>Culex</i> spp.; rodzaje <i>Anopheles</i> spp., <i>Culiseta</i> spp. i <i>Mansonia</i> spp. lokalnie mogą	Cd. W przypadku wszystkich określono masy cząsteczkowe wynoszące kolejno; 68, 67, 37, 30 kDa oraz zsekwencjonowano ich komplementarne DNA. Do innych substancji zawartych w ślinie należa jeszcze: inne czynniki oddziałujące przeciwwzakrzepowo, substancje oddziałujące	Cd. Samice dla zapewnienia rozwoju jajom odżywiają się krwią ludzi i zwierząt stałocieplnych (ssaki, ptaki) Są również w stanie wykorzystywać krew płazów. Do aktu kąsania są zdolne już w ciągu doby do dwóch od


			skrzydeł. Przyczepia się do wielu powierzchni, a po wysuszeniu rozsiewany jest z wiatrem.	i letnich. Te ostatnie żyją zaledwie od kilku godzin do kilku dni. Nie odżywiają się.
Ogółem poznano 19 rodzin.	Inne gatunki najczęściej wywołujące alergię wziewną: <i>Hexagenia bilineata</i> <i>Pentagenia</i> spp			
LEPIDOPTERA(łuskoskrzydłe, motyle) Świat: 120 000 poznanych gatunków Europa: >5000 gatunków Polska: >3000 gatunków	<i>Pyralidae</i> (omacniowate)	<i>Galleria mellonella</i> (barciak większy)	Występujące w larwach termolabilne białka o masach cząsteczkowych uszeregowanych między 20 a 100kDA zawierające epitopy alergenowe. Istnienie wspomnianych epitopów dowiedziono techniką immunoblottingu oraz metodą hamowania testu radioalergosorpcji. Badania powyższe przeprowadzono badając surowicę uczulonego z wyciągami alergenowymi sporządzonymi ze świeżych larw oraz z larw poddanych obróbce cieplnej(mumifikacji)	Znany szkodnik. Gąsienice odżywiają się woskiem i pyłkiem z uli pszczelich. W ciągu roku rozwijają się 3-4 pokolenia.
	<i>Lymantriae</i> (brudnicowate)	<i>Lymantria dispar</i> (brudnica nieparka)	Jad z włosków gąsienic (ze względu na występowanie w jego składzie histaminy, możliwe wywoływanie objawów o charakterze pseudoalergii). Przy masowym narażeniu istotny także kontakt z kałem i częstekami ciała gąsienic.	Pochodzi z Europy. Zawleczona również do USA. Żeruje w liściach iglastych, liściastych i mieszanych. W Europie Środkowej głównie w sadach i na przydrożnych drzewach.
		<i>Orgia pseudotsugata</i> (znamionówka)	Włoski, wydaliny, wydzieliny larw.	Szkodnik drzewostanu w Ameryce Północnej.

TRICHOPTERA (chrusciki) Świat: ok. 10 000 gatun-ków Europa: ponad 900 gatunków Polska: 260 gatunków	20 rodzin; naj-powszechniejsze w Ameryce Płn.; <i>Phryganeidae</i> <i>Limnephilidae</i> <i>Leptoceridae</i>	<i>Phryganea cinerea</i> <i>Gramnotaulius bretteni</i> <i>Tremodes spp.</i> Inne bardzo rozpowszechnione w USA i Kanadzie: <i>Hydropsycheda</i> , <i>Hydropsyche</i> , <i>Oecetis</i> , <i>Neureclipsis</i> , <i>Macronema</i> Europa Środkowa: <i>Limnophilus flavicor-nis</i>	Łatwo przedostające się do powietrza tysiące mikroskopowych włosków (80 – 100 µm dł.) obecnych na powierzchniach skrzydeł. Do organizmu ludzkiego wnikają drogą wziewną. W naszym klimacie loty dorosłych osobników utrzymują się od kwietnia do listopada. Główny alergen: m.cz. 13 000 (bezkręgowcowa hemoglobinopodobna cząsteczka, tzw. erytmokmoryna). Stwarza możliwość ujawnienia klinicznych reakcji krzyżowych w czasie pierwszej ekspozycji na: omułki jadalne, ostrygi, krewetki, kraby; jady owadów: pszczoły i osy. Dane na temat reakcji krzyżowych erytmokmoryny z frakcjami antygenowymi pochodzącyymi ze skrzydeł jedwabników oraz wyciągami z całych ciał muchówek ochołkowatych są sprzeczne.	Cały cykl życiowy, z wyjątkiem żyjącego miesiąc stadium dorosłego, spędżają w wodzie; gasienicopodobna larwa powstaje i przepoczwara się z jaj złożonych w wodzie. Postać dorosła średniej wielkości, przypomina ćmy o szarym lub brązowym ubarwieniu; występuje w pobliżu zbiorników wodnych; odżywia się rzadko lub w ogóle. Chrusciki prowadzą nocny tryb życia; ich loty odbywają się o zmierzchu lub nocą.
HOMOPTERA (równoskrzydłe) podrząd: <i>Aphidina</i> (mszyce)	<i>Aphididae</i> (mszycowate) Świat: ok. 1500 gatunków Polska: ok. 300 gatunków	Brak danych, które rodzaje (gatunki) mszycowatych są odpowiedzialne za odczyny alergiczne	Brak danych	Odżywiają się sokami roślin. Pospolite szkodniki strefy umiarkowanej.

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