

The evolution of insect visual opsin genes with specific consideration of the influence of ocelli and life history traits

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Supplementary material

Table S1: Visual opsin from online sources and literature used for phylogenetic analyses, including accession numbers and references.

Class	Order	Species	Description	Accession number	Data base
Mammalia	Artiodactyla	<i>Bos taurus</i>	Bovine rhodopsin	P02699	Genbank
Insecta	Blattodea	<i>Periplaneta americana</i>	LWS pGO1	KP861985	Genbank
Insecta	Blattodea	<i>Periplaneta americana</i>	LWS pGO2	KP981367	Genbank
Insecta	Blattodea	<i>Periplaneta americana</i>	UVS pUVO	KP941115	Genbank
Insecta	Blattodea	<i>Blattella germanica</i>	LW1	BGER021300	OrthoDB
Insecta	Blattodea	<i>Blattella germanica</i>	UVS	BGER016259-PA	OrthoDB
Insecta	Blattodea	<i>Blattella germanica</i>	LW2	BGER021299-PA	OrthoDB
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> female	LW1	KX118636	Genbank
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> female	LW2	KX118637	Genbank
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> female	UV1	KX118638	Genbank
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> female	UV2	KX118639	Genbank
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> male	LW1	KX118640	Genbank
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> male	LW2	KX118641	Genbank
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> male	UV1	KX118642	Genbank
Insecta	Coleoptera	<i>Acmaeodera diffusa</i> male	UV2	KX118643	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> female	LW1	KX118644	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> female	LW2	KX118645	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> female	UV1	KX118646	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> female	UV2	KX118647	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> male	LW1	KX118648	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> male	LW2	KX118649	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> male	LW3, partial CDS	KX118650	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> male	UV1	KX118651	Genbank
Insecta	Coleoptera	<i>Agrilus planipennis</i> male	UV2	KX118652	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> female	LW1	KX118657	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> female	LW2	KX118658	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> female	UV1	KX118659	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> female	UV2	KX118660	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> male	LW1	KX118653	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> male	LW2	KX118654	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> male	UV1, partial CDS	KX118655	Genbank
Insecta	Coleoptera	<i>Chrysobothris lateralis</i> male	UV2, partial CDS	KX118656	Genbank
Insecta	Coleoptera	<i>Chrysochroa tonkinensis</i> male	LW1	KX118661	Genbank
Insecta	Coleoptera	<i>Chrysochroa tonkinensis</i> male	LW2	KX118662	Genbank
Insecta	Coleoptera	<i>Chrysochroa tonkinensis</i> male	UV1	KX118663	Genbank
Insecta	Coleoptera	<i>Chrysochroa tonkinensis</i> male	UV2	KX118664	Genbank
Insecta	Coleoptera	<i>Sphenoptera</i> sp. female	LW1	KX118665	Genbank

Insecta	Coleoptera	<i>Sphenoptera</i> sp. female	LW2	KX118666	Genbank
Insecta	Coleoptera	<i>Sphenoptera</i> sp. female	UV1	KX118667	Genbank
Insecta	Coleoptera	<i>Sphenoptera</i> sp. female	UV2	KX118668	Genbank
Insecta	Coleoptera	<i>Steraspis amplipennis</i> female	LW1	KX118669	Genbank
Insecta	Coleoptera	<i>Steraspis amplipennis</i> female	LW2	KX118670	Genbank
Insecta	Coleoptera	<i>Steraspis amplipennis</i> female	UV1, partial CDS	KX118671	Genbank
Insecta	Coleoptera	<i>Steraspis amplipennis</i> female	UV2	KX118672	Genbank
Insecta	Coleoptera	<i>Metrius contractus</i>	LWS	APY20628.1	Genbank
Insecta	Coleoptera	<i>Metrius contractus</i>	UVS 2 partial	APY20627.1	Genbank
Insecta	Coleoptera	<i>Metrius contractus</i>	UVS 1 partial	APY20626.1	Genbank
Insecta	Coleoptera	<i>Paussus spinicoxis</i>	UVS	APY20644.1	Genbank
Insecta	Coleoptera	<i>Paussus spinicoxis</i>	LWS	APY20643.1	Genbank
Insecta	Coleoptera	<i>Anorus arizonicus</i>	LWS	APY20490.1	Genbank
Insecta	Coleoptera	<i>Anorus arizonicus</i>	UVS	APY20491.1	Genbank
Insecta	Coleoptera	<i>Allodessus bistrigatus</i>	LWS, partial CDS	KP219381	Genbank
Insecta	Coleoptera	<i>Allodessus bistrigatus</i>	UVS opsin, partial CDS	KP219384	Genbank
Insecta	Coleoptera	<i>Limbodessus palmulaoides</i>	LWS, partial CDS	KP219382	Genbank
Insecta	Coleoptera	<i>Paroster nigroadumbratus</i>	LWS, partial CDS	KP219380	Genbank
Insecta	Coleoptera	<i>Paroster nigroadumbratus</i>	UVS opsin, partial CDS	KP219383	Genbank
Insecta	Coleoptera	<i>Thermonectus marmoratus</i>	LWS	EU921225	Genbank
Insecta	Coleoptera	<i>Thermonectus marmoratus</i>	UV1	EU921226	Genbank
Insecta	Coleoptera	<i>Thermonectus marmoratus</i>	UV2	EU921227	Genbank
Insecta	Coleoptera	<i>Luciola cruciata</i>	LWS	AB300328	Genbank
Insecta	Coleoptera	<i>Luciola cruciata</i>	UVS	AB300329	Genbank
Insecta	Coleoptera	<i>Tribolium castaneum</i>	LWS	NM_001162519	Genbank
Insecta	Coleoptera	<i>Tribolium castaneum</i>	Predicted UVS opsin	XM_965251	Genbank
Insecta	Coleoptera	<i>Nicrophorus vespilloides</i>	LWS	XP_017784754.1	Genbank
Insecta	Coleoptera	<i>Nicrophorus vespilloides</i>	UVS	XP_017780168.1	Genbank
Insecta	Coleoptera	<i>Aspisoma</i> sp.	LWS	KR150954	Genbank
Insecta	Coleoptera	<i>Aspisoma</i> sp.	UVS	KR150965	Genbank
Insecta	Coleoptera	<i>Bicellonycha wickershamorum</i>	LWS	KR150955	Genbank
Insecta	Coleoptera	<i>Bicellonycha wickershamorum</i>	UVS	KR150966	Genbank
Insecta	Coleoptera	<i>Ellychnia</i> sp.	LWS	KR150956	Genbank
Insecta	Coleoptera	<i>Ellychnia</i> sp.	UV1	KR150967	Genbank
Insecta	Coleoptera	<i>Micronaspis floridana</i>	LWS	KR150957	Genbank
Insecta	Coleoptera	<i>Micronaspis floridana</i>	UVS	KR150968	Genbank
Insecta	Coleoptera	<i>Microphotus</i> sp.	UVS	KR150969	Genbank
Insecta	Coleoptera	<i>Phausis reticulata</i>	LWS	KR150958	Genbank
Insecta	Coleoptera	<i>Phausis reticulata</i>	UVS	KR150970	Genbank
Insecta	Coleoptera	<i>Photinus marginellus</i>	LWS	KR150959	Genbank
Insecta	Coleoptera	<i>Photinus marginellus</i>	UVS	KR150971	Genbank
Insecta	Coleoptera	<i>Photinus pyralis</i>	LWS	KR150960	Genbank
Insecta	Coleoptera	<i>Photinus pyralis</i>	UVS	KR150972	Genbank
Insecta	Coleoptera	<i>Photuris</i> sp. 1	LWS	KR150962	Genbank
Insecta	Coleoptera	<i>Photuris</i> sp. 1	UVS	KR150975	Genbank

Insecta	Coleoptera	<i>Pyrrhota dispersa</i>	LWS	KR150963	Genbank
Insecta	Coleoptera	<i>Pyrrhota dispersa</i>	UVS	KR150976	Genbank
Insecta	Coleoptera	<i>Pyrrhota nigrans</i>	LWS	KR150964	Genbank
Insecta	Coleoptera	<i>Pyrrhota nigrans</i>	UVS	KR150977	Genbank
Insecta	Diptera	<i>Lucilia cuprina</i>	LWS opsin Rh6	FF38_07655	Genbank
Insecta	Diptera	<i>Lucilia cuprina</i>	LWS opsin Rh1	FF38_13088	Genbank
Insecta	Diptera	<i>Lucilia cuprina</i>	LWS opsin Rh2	FF38_02731	Genbank
Insecta	Diptera	<i>Lucilia cuprina</i>	Rh5	XP_023298961.1	Genbank
Insecta	Diptera	<i>Lucilia cuprina</i>	Rh3	XP_023304937.1	Genbank
Insecta	Diptera	<i>Polypedium nubifer</i>	LW1	Pn.13635	OrthoDB
Insecta	Diptera	<i>Polypedium nubifer</i>	LW2	Pn.10665	OrthoDB
Insecta	Diptera	<i>Polypedium nubifer</i>	Uvs	Pn.12594	OrthoDB
Insecta	Diptera	<i>Polypedium nubifer</i>	SWS	Pn.02797	OrthoDB
Insecta	Diptera	<i>Polypedium vanderplanki</i>	LW1	Pv.13139	Midgebase
Insecta	Diptera	<i>Polypedium vanderplanki</i>	LW2	Pv.11329	Midgebase
Insecta	Diptera	<i>Polypedium vanderplanki</i>	LW3	Pv.09140	Vectorbase
Insecta	Diptera	<i>Polypedium vanderplanki</i>	LW4	Pv.06802	Vectorbase
Insecta	Diptera	<i>Polypedium vanderplanki</i>	LW5	Pv.07911	Vectorbase
Insecta	Diptera	<i>Polypedium vanderplanki</i>	SWS	Pv.13666	Vectorbase
Insecta	Diptera	<i>Polypedium vanderplanki</i>	UVS	Pv.07686	Vectorbase
Insecta	Diptera	<i>Phlebotomus papatasi</i>	LWS	PPATMP004207	Vectorbase
Insecta	Diptera	<i>Phlebotomus papatasi</i>	UVS	PPAI012816-PA	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	LWS GPROP1	AAEL006498	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	LWS GPROP2	AAEL006259	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	LWS GPROP3	AAEL006484	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	LWS GPROP5	AAEL005625	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	LWS GPROP4	AAEL005621	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	LWS GPROP7	AAEL007389	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	SWS GPROP8	AAEL009615	Vectorbase
Insecta	Diptera	<i>Aedes aegypti</i>	UVS GPROP9	AAEL003035	Vectorbase
Insecta	Diptera	<i>Anopheles albimanus</i>	LW1	AALB009720	Vectorbase
Insecta	Diptera	<i>Anopheles albimanus</i>	SW1	AALB005671	Vectorbase
Insecta	Diptera	<i>Anopheles albimanus</i>	UVS	AALB007939	Vectorbase
Insecta	Diptera	<i>Anopheles albimanus</i>	LW2	AALB009412-PA	Vectorbase
Insecta	Diptera	<i>Anopheles albimanus</i>	LW3	AALB009403-PA	Vectorbase
Insecta	Diptera	<i>Anopheles arabiensis</i>	LW1	AARA001634	Vectorbase
Insecta	Diptera	<i>Anopheles arabiensis</i>	SW1	AARA003689	Vectorbase
Insecta	Diptera	<i>Anopheles arabiensis</i>	UV1	AARA007396	Vectorbase
Insecta	Diptera	<i>Anopheles arabiensis</i>	LW2	AARA015752	Vectorbase
Insecta	Diptera	<i>Anopheles arabiensis</i>	LW3	AARA015751	Vectorbase
Insecta	Diptera	<i>Anopheles arabiensis</i>	LW4	AARA004405	Vectorbase
Insecta	Diptera	<i>Anopheles arabiensis</i>	LW5	AARA016439-PA	Vectorbase
Insecta	Diptera	<i>Anopheles atroparvus</i>	UV1	AATE000714	Vectorbase
Insecta	Diptera	<i>Anopheles atroparvus</i>	SW1	AATE020073	Vectorbase
Insecta	Diptera	<i>Anopheles atroparvus</i>	LW1	AATE015126	Vectorbase

Insecta	Diptera	<i>Anopheles atroparvus</i>	LW1	AATE015876	Vectorbase
Insecta	Diptera	<i>Anopheles christyi</i>	LW1	ACHR004870	Vectorbase
Insecta	Diptera	<i>Anopheles christyi</i>	UV1	ACHR000520	Vectorbase
Insecta	Diptera	<i>Anopheles coluzzii</i>	LW3	ACOM036928	Vectorbase
Insecta	Diptera	<i>Anopheles coluzzii</i>	SW1	ACOM022374	Vectorbase
Insecta	Diptera	<i>Anopheles coluzzii</i>	UV1	ACOM024633	Vectorbase
Insecta	Diptera	<i>Anopheles coluzzii</i>	LW4	ACOM033717	Vectorbase
Insecta	Diptera	<i>Anopheles coluzzii</i>	LW1	ACOM033713	Vectorbase
Insecta	Diptera	<i>Anopheles coluzzii</i>	LW2	ACOM033718	Vectorbase
Insecta	Diptera	<i>Anopheles culicifacies</i>	LW1	ACUA015072	Vectorbase
Insecta	Diptera	<i>Anopheles culicifacies</i>	UV1	ACUA005793	Vectorbase
Insecta	Diptera	<i>Anopheles culicifacies</i>	SW1	ACUA020901	Vectorbase
Insecta	Diptera	<i>Anopheles culicifacies</i>	LW2	ACUA010175	Vectorbase
Insecta	Diptera	<i>Anopheles darlingi</i>	LW1	ADAC004274	Vectorbase
Insecta	Diptera	<i>Anopheles darlingi</i>	SW1	ADAC002343	Vectorbase
Insecta	Diptera	<i>Anopheles darlingi</i>	UV1	ADAC009361	Vectorbase
Insecta	Diptera	<i>Anopheles darlingi</i>	LW2	ADAC008710-PA	Vectorbase
Insecta	Diptera	<i>Anopheles darlingi</i>	LW3	ADAC008709	Vectorbase
Insecta	Diptera	<i>Anopheles dirus</i>	LW1	ADIR008448	Vectorbase
Insecta	Diptera	<i>Anopheles dirus</i>	UV1	ADIR003877	Vectorbase
Insecta	Diptera	<i>Anopheles dirus</i>	SW1	ADIR009291	Vectorbase
Insecta	Diptera	<i>Anopheles dirus</i>	LW2	ADIR010063-PA	Vectorbase
Insecta	Diptera	<i>Anopheles dirus</i>	LW3	ADIR010052-PA	Vectorbase
Insecta	Diptera	<i>Anopheles epiroticus</i>	LW1	AEPI003897	Vectorbase
Insecta	Diptera	<i>Anopheles epiroticus</i>	SW1	AEPI000631	Vectorbase
Insecta	Diptera	<i>Anopheles epiroticus</i>	UV1	AEPI005088	Vectorbase
Insecta	Diptera	<i>Anopheles epiroticus</i>	LW2	AEPI015396-PA	Vectorbase
Insecta	Diptera	<i>Anopheles epiroticus</i>	LW3	AEPI009478-PA	Vectorbase
Insecta	Diptera	<i>Anopheles epiroticus</i>	LW4	AEPI009477-PA	Vectorbase
Insecta	Diptera	<i>Anopheles epiroticus</i>	LW5	AEPI006944-PA	Vectorbase
Insecta	Diptera	<i>Anopheles farauti</i>	LW3	AFAF014109	Vectorbase
Insecta	Diptera	<i>Anopheles farauti</i>	UV1	AFAF007896	Vectorbase
Insecta	Diptera	<i>Anopheles farauti</i>	SW1	AFAF015873	Vectorbase
Insecta	Diptera	<i>Anopheles farauti</i>	LW2	AFAF009291	Vectorbase
Insecta	Diptera	<i>Anopheles farauti</i>	LW1	AFAF003843	Vectorbase
Insecta	Diptera	<i>Anopheles farauti</i>	LW4	AFAF021696-PA	Vectorbase
Insecta	Diptera	<i>Anopheles farauti</i>	LW5	AFAF019507-PA	Vectorbase
Insecta	Diptera	<i>Anopheles funestus</i>	LW1	AFUN003015	Vectorbase
Insecta	Diptera	<i>Anopheles funestus</i>	LW2	AFUN015927-PA	Vectorbase
Insecta	Diptera	<i>Anopheles funestus</i>	LW3	AFUN015928-PA	Vectorbase
Insecta	Diptera	<i>Anopheles funestus</i>	LW4	AFUN009231-PA	Vectorbase
Insecta	Diptera	<i>Anopheles funestus</i>	SW1	AFUN000077	Vectorbase
Insecta	Diptera	<i>Anopheles funestus</i>	UV1	AFUN008681	Vectorbase
Insecta	Diptera	<i>Anopheles gambiae</i>	SWS GPROP9	AGAP010089	Vectorbase
Insecta	Diptera	<i>Anopheles gambiae</i>	UVS GPROP8	AGAP006126	Vectorbase

Insecta	Diptera	<i>Anopheles gambiae</i>	LWS GPROP7	AGAP002462	Vectorbase
Insecta	Diptera	<i>Anopheles gambiae</i>	LWS GPROP5	AGAP001162	Vectorbase
Insecta	Diptera	<i>Anopheles gambiae</i>	LWS GPROP6	AGAP001161	Vectorbase
Insecta	Diptera	<i>Anopheles gambiae</i>	LWS GPROP3	AGAP012982	Vectorbase
Insecta	Diptera	<i>Anopheles gambiae</i>	LWS GPROP1	AGAP013149	Vectorbase
Insecta	Diptera	<i>Anopheles gambiae</i>	LWS GPROP4	AGAP012985	Vectorbase
Insecta	Diptera	<i>Anopheles maculatus</i>	LW1	AMAM003408	Vectorbase
Insecta	Diptera	<i>Anopheles maculatus</i>	UV1	AMAM006721	Vectorbase
Insecta	Diptera	<i>Anopheles maculatus</i>	SW1	AMAM012926	Vectorbase
Insecta	Diptera	<i>Anopheles maculatus</i>	LW3	AMAM020501	Vectorbase
Insecta	Diptera	<i>Anopheles maculatus</i>	LW2	AMAM007786	Vectorbase
Insecta	Diptera	<i>Anopheles melas</i>	LW1	AMEC011676	Vectorbase
Insecta	Diptera	<i>Anopheles melas</i>	UV1	AMEC004839	Vectorbase
Insecta	Diptera	<i>Anopheles melas</i>	LW2	AMEC002166	Vectorbase
Insecta	Diptera	<i>Anopheles melas</i>	LW3	AMEC017650	Vectorbase
Insecta	Diptera	<i>Anopheles melas</i>	SW1	AMEC011848	Vectorbase
Insecta	Diptera	<i>Anopheles merus</i>	LW1	AMEM009742	Vectorbase
Insecta	Diptera	<i>Anopheles merus</i>	SW1	AMEM008304	Vectorbase
Insecta	Diptera	<i>Anopheles merus</i>	UV1	AMEM011193	Vectorbase
Insecta	Diptera	<i>Anopheles merus</i>	LW4	AMEM001120	Vectorbase
Insecta	Diptera	<i>Anopheles merus</i>	LW5	AMEM019073-PA	Vectorbase
Insecta	Diptera	<i>Anopheles merus</i>	LW2	AMEM002290	Vectorbase
Insecta	Diptera	<i>Anopheles merus</i>	LW3	AMEM012628	Vectorbase
Insecta	Diptera	<i>Anopheles minimus</i>	SW1	AMIN006637	Vectorbase
Insecta	Diptera	<i>Anopheles minimus</i>	UV1	AMIN010687	Vectorbase
Insecta	Diptera	<i>Anopheles minimus</i>	LW3	AMIN015620	Vectorbase
Insecta	Diptera	<i>Anopheles minimus</i>	LW4	AMIN002733-PA	Vectorbase
Insecta	Diptera	<i>Anopheles minimus</i>	LW1	AMIN015621	Vectorbase
Insecta	Diptera	<i>Anopheles minimus</i>	LW2	AMIN015622	Vectorbase
Insecta	Diptera	<i>Anopheles quadriannulatus</i>	LWS	AQUA009493-PA	Vectorbase
Insecta	Diptera	<i>Anopheles quadriannulatus</i>	LW2	AQUA011615-PA	Vectorbase
Insecta	Diptera	<i>Anopheles quadriannulatus</i>	SW5	AQUA009190-PA	Vectorbase
Insecta	Diptera	<i>Anopheles quadriannulatus</i>	UV5	AQUA011676-PA	Vectorbase
Insecta	Diptera	<i>Anopheles sinensis</i>	LW5	ASIC021047	Vectorbase
Insecta	Diptera	<i>Anopheles sinensis</i>	UV1	ASIC009887	Vectorbase
Insecta	Diptera	<i>Anopheles sinensis</i>	SW1	ASIC010114	Vectorbase
Insecta	Diptera	<i>Anopheles sinensis</i>	LW4	ASIC011457	Vectorbase
Insecta	Diptera	<i>Anopheles sinensis</i>	LW1	ASIC011455	Vectorbase
Insecta	Diptera	<i>Anopheles sinensis</i>	LW2	ASIC011456	Vectorbase
Insecta	Diptera	<i>Anopheles sinensis</i>	LW3	ASIC011459	Vectorbase
Insecta	Diptera	<i>Anopheles stephensi</i>	LW1	ASTE008931	Vectorbase
Insecta	Diptera	<i>Anopheles stephensi</i>	LW2	ASTE005760-PA	Vectorbase
Insecta	Diptera	<i>Anopheles stephensi</i>	UV1	ASTE001026	Vectorbase
Insecta	Diptera	<i>Anopheles stephensi</i>	SW1	ASTE008397	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	LWS GPROP13	CPIJ020021	Vectorbase

Insecta	Diptera	<i>Culex quinquefasciatus</i>	GPROP6	CPIJ011571	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	SWS GPROP11	CPIJ013408	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	LWS GPROP9	CPIJ011576	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	SWS GPROP2	CPIJ005000	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	UVS GPROP3	CPIJ009246	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	LWS GPROP5	CPIJ012052	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	LWS GPROP7	CPIJ011573	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	LWS GPROP10	CPIJ013056	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	LWS GPROP1	CPIJ004067	Vectorbase
Insecta	Diptera	<i>Culex quinquefasciatus</i>	LWS GPROP8	CPIJ011574	Vectorbase
Insecta	Diptera	<i>Drosophila ananassae</i>	LWS opsin Rh6	XP_001954516.1	Genbank
Insecta	Diptera	<i>Drosophila ananassae</i>	LWS opsin Rh2	XP_001964505.1	Genbank
Insecta	Diptera	<i>Drosophila ananassae</i>	LWS opsin Rh1	XP_001953154.1	Genbank
Insecta	Diptera	<i>Drosophila ananassae</i>	UVS opsin Rh3	XP_001953183.1	Genbank
Insecta	Diptera	<i>Drosophila ananassae</i>	UVS opsin Rh4	XP_001957616.1	Genbank
Insecta	Diptera	<i>Drosophila ananassae</i>	SWS opsin Rh5	XP_001962502.1	Genbank
Insecta	Diptera	<i>Drosophila erecta</i>	LWS opsin Rh6	XP_001980069.1	Genbank
Insecta	Diptera	<i>Drosophila erecta</i>	LWS opsin Rh2	XP_001979595.1	Genbank
Insecta	Diptera	<i>Drosophila erecta</i>	LWS opsin Rh1	XP_001979489.1	Genbank
Insecta	Diptera	<i>Drosophila erecta</i>	UVS opsin Rh3	XP_001979457.1	Genbank
Insecta	Diptera	<i>Drosophila erecta</i>	UVS opsin Rh4	XP_001973000.1	Genbank
Insecta	Diptera	<i>Drosophila erecta</i>	SWS opsin Rh5	XP_001969784.1	Genbank
Insecta	Diptera	<i>Drosophila grimshawi</i>	UVS opsin Rh3	XP_001994332.1	Genbank
Insecta	Diptera	<i>Drosophila grimshawi</i>	SWS opsin Rh5	XP_001993385.1	Genbank
Insecta	Diptera	<i>Drosophila grimshawi</i>	UVS opsin Rh4	XP_001985448.1	Genbank
Insecta	Diptera	<i>Drosophila grimshawi</i>	LWS opsin Rh2	XP_001994721.1	Genbank
Insecta	Diptera	<i>Drosophila grimshawi</i>	LWS opsin Rh1	XP_001994160.1	Genbank
Insecta	Diptera	<i>Drosophila grimshawi</i>	LWS opsin Rh6	XP_001989955.1	Genbank
Insecta	Diptera	<i>Drosophila melanogaster</i>	LWS opsin Rh1	P06002.1	Genbank
Insecta	Diptera	<i>Drosophila melanogaster</i>	LWS opsin Rh2	P08099.1	Genbank
Insecta	Diptera	<i>Drosophila melanogaster</i>	UVS opsin Rh3	P04950.1	Genbank
Insecta	Diptera	<i>Drosophila melanogaster</i>	UVS opsin Rh4	P08255	Genbank
Insecta	Diptera	<i>Drosophila melanogaster</i>	SWS opsin Rh5	P91657	Genbank
Insecta	Diptera	<i>Drosophila melanogaster</i>	LWS opsin Rh6	O01668	Genbank
Insecta	Diptera	<i>Drosophila mojavensis</i>	SWS opsin Rh5	XP_002002075.1	Genbank
Insecta	Diptera	<i>Drosophila mojavensis</i>	UVS opsin Rh4	XP_002008720.1	Genbank
Insecta	Diptera	<i>Drosophila mojavensis</i>	UVS opsin Rh3	XP_002000102.1	Genbank
Insecta	Diptera	<i>Drosophila mojavensis</i>	LWS opsin Rh1	XP_002000610.1	Genbank
Insecta	Diptera	<i>Drosophila mojavensis</i>	LWS opsin Rh2	XP_015022466.1	Genbank
Insecta	Diptera	<i>Drosophila mojavensis</i>	LWS opsin Rh6	XP_001999156.1	Genbank
Insecta	Diptera	<i>Drosophila persimilis</i>	LWS opsin Rh6	XP_002012764.1	Genbank
Insecta	Diptera	<i>Drosophila persimilis</i>	LWS opsin Rh2	XP_002013381.1	Genbank
Insecta	Diptera	<i>Drosophila persimilis</i>	LWS opsin Rh1	XP_002019467.1	Genbank
Insecta	Diptera	<i>Drosophila persimilis</i>	UVS opsin Rh3	XP_002019665.1	Genbank
Insecta	Diptera	<i>Drosophila persimilis</i>	UVS opsin Rh4	XP_002025707.1	Genbank

Insecta	Diptera	<i>Drosophila persimilis</i>	SWS opsin Rh5	XP_002020861.1	Genbank
Insecta	Diptera	<i>Drosophila pseudoobscura</i>	LWS opsin Rh6	XP_002137154.1	Genbank
Insecta	Diptera	<i>Drosophila pseudoobscura</i>	LWS opsin Rh2	XP_001358861.1	Genbank
Insecta	Diptera	<i>Drosophila pseudoobscura</i>	LWS opsin Rh1	XP_001359729.2	Genbank
Insecta	Diptera	<i>Drosophila pseudoobscura</i>	UVS opsin Rh3	XP_001359863.3	Genbank
Insecta	Diptera	<i>Drosophila pseudoobscura</i>	UVS opsin Rh4	XP_002135490.1	Genbank
Insecta	Diptera	<i>Drosophila pseudoobscura</i>	SWS opsin Rh5	XP_001357162.1	Genbank
Insecta	Diptera	<i>Drosophila sechellia</i>	LWS opsin Rh2	XP_002038182.1	Genbank
Insecta	Diptera	<i>Drosophila sechellia</i>	LWS opsin Rh6	XP_002031051.1	Genbank
Insecta	Diptera	<i>Drosophila sechellia</i>	LWS opsin Rh1	XP_002043271.1	Genbank
Insecta	Diptera	<i>Drosophila sechellia</i>	UVS opsin Rh3	XP_002044591.1	Genbank
Insecta	Diptera	<i>Drosophila sechellia</i>	UVS opsin Rh4	XP_002030831.1	Genbank
Insecta	Diptera	<i>Drosophila sechellia</i>	SWS opsin Rh5	XP_002042005.1	Genbank
Insecta	Diptera	<i>Drosophila simulans</i>	LWS opsin Rh2	XP_002102902.1	Genbank
Insecta	Diptera	<i>Drosophila simulans</i>	LWS opsin Rh6	XP_002103304.1	Genbank
Insecta	Diptera	<i>Drosophila simulans</i>	LWS opsin Rh1	XP_002102788.1	Genbank
Insecta	Diptera	<i>Drosophila simulans</i>	UVS opsin Rh4	XP_002085202.1	Genbank
Insecta	Diptera	<i>Drosophila simulans</i>	SWS opsin Rh5	XP_002079172.1	Genbank
Insecta	Diptera	<i>Drosophila simulans</i>	UVS opsin Rh3	XP_002102756.1	Genbank
Insecta	Diptera	<i>Drosophila suzukii</i>	LWS opsin Rh6	DS10_00012865	OrthoDB
Insecta	Diptera	<i>Drosophila suzukii</i>	LWS opsin Rh1	DS10_00011751	OrthoDB
Insecta	Diptera	<i>Drosophila suzukii</i>	UV1	DS10_00009674	OrthoDB
Insecta	Diptera	<i>Drosophila suzukii</i>	UV2	DS10_00006301	OrthoDB
Insecta	Diptera	<i>Drosophila suzukii</i>	SWS opsin Rh5	DS10_00001977	OrthoDB
Insecta	Diptera	<i>Drosophila virilis</i>	SWS opsin Rh5	XP_002052352.1	Genbank
Insecta	Diptera	<i>Drosophila virilis</i>	UVS opsin Rh4	XP_002048466.1	Genbank
Insecta	Diptera	<i>Drosophila virilis</i>	UVS opsin Rh3	XP_002053257.1	Genbank
Insecta	Diptera	<i>Drosophila virilis</i>	LWS opsin Rh2	XP_002058664.1	Genbank
Insecta	Diptera	<i>Drosophila virilis</i>	LWS opsin Rh1	XP_015025815.1	Genbank
Insecta	Diptera	<i>Drosophila virilis</i>	LWS opsin Rh6	XP_002054291.1	Genbank
Insecta	Diptera	<i>Drosophila willistoni</i>	LWS opsin Rh6	XP_002069644.1	Genbank
Insecta	Diptera	<i>Drosophila willistoni</i>	LWS opsin Rh1	XP_002072370.1	Genbank
Insecta	Diptera	<i>Drosophila willistoni</i>	LWS opsin Rh2	XP_002072233.1	Genbank
Insecta	Diptera	<i>Drosophila willistoni</i>	UVS opsin Rh3	XP_002072344.2	Genbank
Insecta	Diptera	<i>Drosophila willistoni</i>	UVS opsin Rh4	XP_002065933.1	Genbank
Insecta	Diptera	<i>Drosophila willistoni</i>	SWS opsin Rh5	XP_002064582.2	Genbank
Insecta	Diptera	<i>Drosophila yakuba</i>	LWS opsin Rh2	XP_002096245.1	Genbank
Insecta	Diptera	<i>Drosophila yakuba</i>	LWS opsin Rh6	XP_002097726.1	Genbank
Insecta	Diptera	<i>Drosophila yakuba</i>	LWS opsin Rh1	XP_002096362.1	Genbank
Insecta	Diptera	<i>Drosophila yakuba</i>	UVS opsin Rh3	XP_002096395.1	Genbank
Insecta	Diptera	<i>Drosophila yakuba</i>	UVS opsin Rh4	XP_002095072.1	Genbank
Insecta	Diptera	<i>Drosophila yakuba</i>	SWS opsin Rh5	XP_002088425.1	Genbank
Insecta	Diptera	<i>Glossina austeni</i>	LWS opsin Rh6	GAUT031723	Vectorbase
Insecta	Diptera	<i>Glossina austeni</i>	LWS opsin Rh1	GAUT049378	Vectorbase
Insecta	Diptera	<i>Glossina austeni</i>	SWS	GAUT022655-PA	Vectorbase

Insecta	Diptera	<i>Glossina austeni</i>	LWS opsin Rh2	GAUT045766	Vectorbase
Insecta	Diptera	<i>Glossina austeni</i>	UVS	GAUT024920-PA	Vectorbase
Insecta	Diptera	<i>Glossina brevipalpis</i>	LWS opsin Rh6	GBRI021874	Vectorbase
Insecta	Diptera	<i>Glossina brevipalpis</i>	LWS opsin Rh1	GBRI011016	Vectorbase
Insecta	Diptera	<i>Glossina brevipalpis</i>	LWS opsin Rh2	GBRI007285	Vectorbase
Insecta	Diptera	<i>Glossina brevipalpis</i>	UVS	GBRI005810-PA	Vectorbase
Insecta	Diptera	<i>Glossina brevipalpis</i>	SWS	GBRI035671-PA	Vectorbase
Insecta	Diptera	<i>Glossina fuscipes</i>	LWS opsin Rh2	GFUI006860	Vectorbase
Insecta	Diptera	<i>Glossina fuscipes</i>	LWS opsin Rh1	GFUI008710	Vectorbase
Insecta	Diptera	<i>Glossina fuscipes</i>	LWS opsin Rh6	GFUI009402	Vectorbase
Insecta	Diptera	<i>Glossina fuscipes</i>	SWS	GFUI001914-PA	Vectorbase
Insecta	Diptera	<i>Glossina fuscipes</i>	UVS	GFUI052420-PA	Vectorbase
Insecta	Diptera	<i>Glossina morsitans</i>	LWS opsin Rh1	A0A1A9YUE7	Vectorbase
Insecta	Diptera	<i>Glossina morsitans</i>	LWS opsin Rh6	A0A1B0G7X7	Vectorbase
Insecta	Diptera	<i>Glossina morsitans</i>	UVS opsin Rh3	A0A1B0GFS1	Vectorbase
Insecta	Diptera	<i>Glossina morsitans</i>	SWS opsin Rh5	A0A1B0G0G9	Vectorbase
Insecta	Diptera	<i>Glossina pallidipes</i>	LWS opsin Rh2	GPAI013780	Vectorbase
Insecta	Diptera	<i>Glossina pallidipes</i>	LWS opsin Rh1	GPAI002993	Vectorbase
Insecta	Diptera	<i>Glossina pallidipes</i>	LWS opsin Rh6	GPAI014905	Vectorbase
Insecta	Diptera	<i>Glossina pallidipes</i>	SWS	GPAI037424-PA	Vectorbase
Insecta	Diptera	<i>Glossina pallidipes</i>	UVS	GPAI025187-PA	Vectorbase
Insecta	Diptera	<i>Glossina palpalis</i>	LWS opsin Rh2	GPPI040370	Vectorbase
Insecta	Diptera	<i>Glossina palpalis</i>	LWS opsin Rh1	GPPI000721	Vectorbase
Insecta	Diptera	<i>Glossina palpalis</i>	LWS opsin Rh6	GPPI035720	Vectorbase
Insecta	Diptera	<i>Glossina palpalis</i>	SWS	GPPI030124-PA	Vectorbase
Insecta	Diptera	<i>Glossina palpalis</i>	UVS	GPPI010273-PA	Vectorbase
Insecta	Diptera	<i>Musca domestica</i>	Predicted opsin Rh2	XM_005191103.3	Genbank
Insecta	Diptera	<i>Musca domestica</i>	Predicted opsin Rh3	XM_005190015.3	Genbank
Insecta	Diptera	<i>Musca domestica</i>	Predicted opsin Rh5	XM_005175033.3	Genbank
Insecta	Diptera	<i>Musca domestica</i>	Predicted opsin Rh6	XM_005186040.3	Genbank
Insecta	Diptera	<i>Musca domestica</i>	Predicted opsin Rh1	XM_005182926.3	Genbank
Insecta	Diptera	<i>Bactrocera cucurbitae</i>	LW2 opsin Rh6	XP_011196906.1	Genbank
Insecta	Diptera	<i>Bactrocera cucurbitae</i>	LW3 opsin Rh1	XP_011179263.1	Genbank
Insecta	Diptera	<i>Bactrocera cucurbitae</i>	LW1 opsin Rh2	XP_011187685.1	Genbank
Insecta	Diptera	<i>Bactrocera cucurbitae</i>	UV1	XP_011181346.1	Genbank
Insecta	Diptera	<i>Bactrocera cucurbitae</i>	UV2	XP_011181345.1	Genbank
Insecta	Diptera	<i>Bactrocera dorsalis</i>	LWS opsin Rh6	XP_011208252.1	Genbank
Insecta	Diptera	<i>Bactrocera dorsalis</i>	LWS opsin Rh1	NP_001291902.1	Genbank
Insecta	Diptera	<i>Bactrocera dorsalis</i>	LWS opsin Rh2	XP_011203454.1	Genbank
Insecta	Diptera	<i>Bactrocera dorsalis</i>	UV1	XP_011214169.1	Genbank
Insecta	Diptera	<i>Bactrocera dorsalis</i>	UV2	XP_011214168.1	Genbank
Insecta	Diptera	<i>Bactrocera oleae</i>	LW1	XP_014103404.1	Genbank
Insecta	Diptera	<i>Bactrocera oleae</i>	UV1	XP_014088320.1	Genbank
Insecta	Diptera	<i>Bactrocera oleae</i>	UV2	XP_014088321.1	Genbank
Insecta	Diptera	<i>Bactrocera oleae</i>	LW3	XP_014087806.1	Genbank

Insecta	Diptera	<i>Bactrocera oleae</i>	LW2	XP_014085801.1	Genbank
Insecta	Diptera	<i>Bactrocera tryoni</i>	LW2 opsin Rh6	maker-JHQJ01000002.1-augustus-	OrthoDB
Insecta	Diptera	<i>Bactrocera tryoni</i>	LW1 opsin Rh1	genemark-JHQJ01000053.1-proces	OrthoDB
Insecta	Diptera	<i>Bactrocera tryoni</i>	LW3 opsin Rh2	maker-JHQJ01000373.1-augustus-	OrthoDB
Insecta	Diptera	<i>Ceratitis capitata</i>	LW1 opsin Rh6	CCAP001816	OrthoDB
Insecta	Diptera	<i>Ceratitis capitata</i>	LW3 opsin Rh1	CCAP012108	OrthoDB
Insecta	Diptera	<i>Ceratitis capitata</i>	LW2 opsin Rh2	CCAP011484	OrthoDB
Insecta	Diptera	<i>Ceratitis capitata</i>	UV1	NW_004523825.1.137	Vectorbase
Insecta	Diptera	<i>Ceratitis capitata</i>	UV2	NW_004523825.1.146	Vectorbase
Insecta	Ephemeroptera	<i>Ephemera danica</i>	LWS 1	EDAN017154	OrthoDB
Insecta	Ephemeroptera	<i>Ephemera danica</i>	LWS 3	EDAN012870	OrthoDB
Insecta	Ephemeroptera	<i>Ephemera danica</i>	LW2	LWS_sc8	Almudi et al 2019
Insecta	Ephemeroptera	<i>Ephemera danica</i>	LW2a	LWS2-4a	Almudi et al 2019
Insecta	Ephemeroptera	<i>Ephemera danica</i>	LW2b	LWS2-4b	Almudi et al 2019
Insecta	Ephemeroptera	<i>Ephemera danica</i>	SW1	Blue-OpsA	Almudi et al 2019
Insecta	Ephemeroptera	<i>Ephemera danica</i>	SW2	Blue-OpsB	Almudi et al 2019
Insecta	Ephemeroptera	<i>Ephemera danica</i>	SW3	Blue-OpsC	Almudi et al 2019
Insecta	Ephemeroptera	<i>Ephemera danica</i>	UV	UVOps	Almudi et al 2019
Insecta	Ephemeroptera	<i>Epeorus</i> sp. EP006	LW2	LWS2-4	Almudi et al 2019
Insecta	Ephemeroptera	<i>Epeorus</i> sp. EP006	LW1a	LWS_sc8a	Almudi et al 2019
Insecta	Ephemeroptera	<i>Epeorus</i> sp. EP006	LW1b	LWS_sc8b	Almudi et al 2019
Insecta	Ephemeroptera	<i>Epeorus</i> sp. EP006	UV	UVOps	Almudi et al 2019
Insecta	Ephemeroptera	<i>Epeorus</i> sp. EP006	SW1	Blue-OpsB-C	Almudi et al 2019
Insecta	Ephemeroptera	<i>Epeorus</i> sp. EP006	SW2	Blue-OpsA	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	LW1	LWS1	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	LW2	LWS2	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	LW3	LWS3	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	LW4	LWS4	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	UV1	UV-Ops1	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	UV2	UV-Ops2	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	UV3	UV-Ops3	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	UV4	UV-Ops4	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	SW1	Blue-Ops1	Almudi et al 2019
Insecta	Ephemeroptera	<i>Cloeon dipterum</i>	SW2	Blue-Ops2	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	LW1	LWS1	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	LW2	LWS2_comp10738_1670	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	LW3	LWS3	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	LW4	LWS4	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	UV1	UV-Ops1	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	UV2	UV-Ops2	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	UV3	UV-Ops3-4_comp17374 + UV-Ops3	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. EP001	SW1	Blue-Ops1 + Blue-Ops2	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	LW1	LWS1	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	LW2a	LWS2_s2294	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	LW2b	LWS2_s2295	Almudi et al 2019

Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	LW3	LWS3	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	LW4a	LWS4_s236	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	LW4b	LWS4_s8732	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	UV2a	UV-Ops2_s5198	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	UV2b	UV-Ops2_s6693	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	UV3	UV-Ops3-4_C119883	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	UV4	UV-Ops3-4_s7501	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	SW1	Blue-Ops1	Almudi et al 2019
Insecta	Ephemeroptera	<i>Baetis</i> sp. AD2013	SW2	Blue-Ops2	Almudi et al 2019
Insecta	Hemiptera	<i>Rhopalosiphum padi</i>	UV1		given by Dr. Xiong PENG
Insecta	Hemiptera	<i>Rhopalosiphum padi</i>	UV2		given by Dr. Xiong PENG
Insecta	Hemiptera	<i>Rhopalosiphum padi</i>	LW		given by Dr. Xiong PENG
Insecta	Hemiptera	<i>Acyrtosiphon pisum</i>	LW	XM_016806354.1	Genbank
Insecta	Hemiptera	<i>Acyrtosiphon pisum</i>	UV2	XP_001951613.2_	Genbank
Insecta	Hemiptera	<i>Acyrtosiphon pisum</i>	UV1	XP_001951588.1	Genbank
Insecta	Hemiptera	<i>Megoura viciae</i>	LWS	AF189714	Genbank
Insecta	Hemiptera	<i>Megoura viciae</i>	UVS	AF189715	Genbank
Insecta	Hemiptera	<i>Empoasca vitis</i>	LWS	KF938691.1	Genbank
Insecta	Hemiptera	<i>Empoasca vitis</i>	SWS	KJ813817.1	Genbank
Insecta	Hemiptera	<i>Empoasca vitis</i>	UVS	KJ123697.1	Genbank
Insecta	Hemiptera	<i>Homalodisca vitripennis</i>	LWS	HVIT023768	Vectorbase
Insecta	Hemiptera	<i>Homalodisca vitripennis</i>	UVS	HVIT000894-PA	Vectorbase
Insecta	Hemiptera	<i>Homalodisca vitripennis</i>	SWS	HVIT015891-PA	Vectorbase
Insecta	Hemiptera	<i>Nephotettix cincticeps</i>	LWS	AB761156	Genbank
Insecta	Hemiptera	<i>Nephotettix cincticeps</i>	SWS	AB761157	Genbank
Insecta	Hemiptera	<i>Nephotettix cincticeps</i>	UVS	AB761158	Genbank
Insecta	Hemiptera	<i>Cimex lectularius</i>	LWS	CLEC001711	OrthoDB
Insecta	Hemiptera	<i>Cimex lectularius</i>	UVS	CLEC004512-RA	OrthoDB
Insecta	Hemiptera	<i>Laodelphax striatella</i>	LWS	AB761153	Genbank
Insecta	Hemiptera	<i>Laodelphax striatella</i>	UV1	AB761154	Genbank
Insecta	Hemiptera	<i>Laodelphax striatella</i>	UV2	AB761155	Genbank
Insecta	Hemiptera	<i>Nilaparvata lugens</i>	LWS	AB761147	Genbank
Insecta	Hemiptera	<i>Nilaparvata lugens</i>	UV1	AB761148	Genbank
Insecta	Hemiptera	<i>Nilaparvata lugens</i>	UV2	AB761149	Genbank
Insecta	Hemiptera	<i>Sogatella furcifera</i>	LWS	AB761150	Genbank
Insecta	Hemiptera	<i>Sogatella furcifera</i>	UV1	AB761151	Genbank
Insecta	Hemiptera	<i>Sogatella furcifera</i>	UV2	AB761152	Genbank
Insecta	Hemiptera	<i>Gerris buenoi</i>	LW1	GBUE012030	OrthoDB
Insecta	Hemiptera	<i>Gerris buenoi</i>	LW2	GBUE012031	OrthoDB
Insecta	Hemiptera	<i>Gerris buenoi</i>	LW3	GBUE012032	OrthoDB
Insecta	Hemiptera	<i>Gerris buenoi</i>	LW4	GBUE012033	OrthoDB
Insecta	Hemiptera	<i>Gerris buenoi</i>	UV1_partial	GBUE021384-PA	i5k
Insecta	Hemiptera	<i>Oncopeltus fasciatus</i>	LW1	OFAS003182	i5k
Insecta	Hemiptera	<i>Oncopeltus fasciatus</i>	UVS	OFAS011699-PA	i5k
Insecta	Hemiptera	<i>Oncopeltus fasciatus</i>	LW2	OFAS003183	i5k

Insecta	Hemiptera	<i>Halyomorpha halys</i>	LW1	HHAL007248	Vectorbase
Insecta	Hemiptera	<i>Halyomorpha halys</i>	LW2	HHAL007249	Vectorbase
Insecta	Hemiptera	<i>Halyomorpha halys</i>	UVS	HHAL001114-PA	Vectorbase
Insecta	Hemiptera	<i>Diaphorina citri</i>	LW1	XP_008480124.1	Genbank
Insecta	Hemiptera	<i>Diaphorina citri</i>	LW1	XP_008480123.1	Genbank
Insecta	Hemiptera	<i>Diaphorina citri</i>	UVS	XP_008480708.1	Genbank
Insecta	Hemiptera	<i>Diaphorina citri</i>	SWS	XP_008479953.1	Genbank
Insecta	Hemiptera	<i>Rhodnius prolixus</i>	LW1	RPRC010623	Vectorbase
Insecta	Hemiptera	<i>Rhodnius prolixus</i>	UVS	RPRC002621-PA	Vectorbase
Insecta	Hemiptera	<i>Bemisia tabaci</i>	SWS	XP_018913779.1	Genbank
Insecta	Hemiptera	<i>Bemisia tabaci</i>	UVS	XP_018909731.1	Genbank
Insecta	Hemiptera	<i>Bemisia tabaci</i>	LW1	XP_018901682.1	Genbank
Insecta	Hymenoptera	<i>Ceratosolen solmsi</i>	LW1	JX402130	OrthoDB
Insecta	Hymenoptera	<i>Ceratosolen solmsi</i>	LW2	JX402131	OrthoDB
Insecta	Hymenoptera	<i>Ceratosolen solmsi</i>	SWS	JX402132	OrthoDB
Insecta	Hymenoptera	<i>Ceratosolen solmsi</i>	UVS	JX402133	OrthoDB
Insecta	Hymenoptera	<i>Apis cerana</i>	LW1	ACSNU07734T0	OrthoDB
Insecta	Hymenoptera	<i>Apis cerana</i>	LW2	ACSNU07733T0	OrthoDB
Insecta	Hymenoptera	<i>Apis cerana</i>	SW1	ACSNU05647T0	OrthoDB
Insecta	Hymenoptera	<i>Apis cerana</i>	UV1	AB355816.1	Genbank
Insecta	Hymenoptera	<i>Apis dorsata</i>	UV1	51584357	OrthoDB
Insecta	Hymenoptera	<i>Apis dorsata</i>	LWS	51569490	OrthoDB
Insecta	Hymenoptera	<i>Apis dorsata</i>	LWS	51569495	OrthoDB
Insecta	Hymenoptera	<i>Apis dorsata</i>	SW1	51578434	OrthoDB
Insecta	Hymenoptera	<i>Apis florea</i>	UV1	2481023892	OrthoDB
Insecta	Hymenoptera	<i>Apis florea</i>	LW1	2379349636	OrthoDB
Insecta	Hymenoptera	<i>Apis florea</i>	LW1	2379349700	OrthoDB
Insecta	Hymenoptera	<i>Apis florea</i>	SW1	2478935732	OrthoDB
Insecta	Hymenoptera	<i>Apis mellifera</i>	Lop1	NM_001011639	Genbank
Insecta	Hymenoptera	<i>Apis mellifera</i>	Lop2	NM_001077825	Genbank
Insecta	Hymenoptera	<i>Apis mellifera</i>	Blop	NM_001011606	Genbank
Insecta	Hymenoptera	<i>Apis mellifera</i>	Uvop	NM_001011605	Genbank
Insecta	Hymenoptera	<i>Bombus impatiens</i>	UV1	AY655163.1	Genbank
Insecta	Hymenoptera	<i>Bombus impatiens</i>	LWRh1	AY485302.1	Genbank
Insecta	Hymenoptera	<i>Bombus impatiens</i>	LWRh2	AY485306.1	Genbank
Insecta	Hymenoptera	<i>Bombus impatiens</i>	SW1	Bimp_2.0	OrthoDB
Insecta	Hymenoptera	<i>Bombus terrestris</i>	UV1	15202080	OrthoDB
Insecta	Hymenoptera	<i>Bombus terrestris</i>	LW1	15205607	OrthoDB
Insecta	Hymenoptera	<i>Bombus terrestris</i>	LW1	15205608	OrthoDB
Insecta	Hymenoptera	<i>Bombus terrestris</i>	SW1	15207536	OrthoDB
Insecta	Hymenoptera	<i>Bombus terrestris sassaricus</i>	LWRh1	AY485301.1	Genbank
Insecta	Hymenoptera	<i>Bombus terrestris sassaricus</i>	LWRh2	AY485305.1	Genbank
Insecta	Hymenoptera	<i>Diadasia afflicta</i>	LWRh1	AY485303	Genbank
Insecta	Hymenoptera	<i>Diadasia afflicta</i>	LWRh2	AY485308	Genbank
Insecta	Hymenoptera	<i>Diadasia rinconis</i>	LWRh1	AY485304	Genbank

Insecta	Hymenoptera	<i>Diadasia rinconis</i>	LWRh2	AY485307	Genbank
Insecta	Hymenoptera	<i>Eufriesea mexicana</i>	UV1	EMEXI:000c6e	OrthoDB
Insecta	Hymenoptera	<i>Eufriesea mexicana</i>	LW1	EMEXI:000aeb	OrthoDB
Insecta	Hymenoptera	<i>Eufriesea mexicana</i>	LW2	EMEXI:0028d6	OrthoDB
Insecta	Hymenoptera	<i>Eufriesea mexicana</i>	SW1	EMEXI:0011f4	OrthoDB
Insecta	Hymenoptera	<i>Euglossa dilemma</i>	UVS opsin	Edil_09953	i5k
Insecta	Hymenoptera	<i>Euglossa dilemma</i>	LW1	Edil_07671	i5k
Insecta	Hymenoptera	<i>Euglossa dilemma</i>	LW2	Edil_07551	i5k
Insecta	Hymenoptera	<i>Euglossa dilemma</i>	SWS opsin	Edil_04295	i5k
Insecta	Hymenoptera	<i>Habropoda laboriosa</i>	UV1	HLABO:002143	OrthoDB
Insecta	Hymenoptera	<i>Habropoda laboriosa</i>	LW1	HLABO:002b53	OrthoDB
Insecta	Hymenoptera	<i>Habropoda laboriosa</i>	LW1	HLABO:002b54	OrthoDB
Insecta	Hymenoptera	<i>Habropoda laboriosa</i>	SW1	HLABO:00190f	OrthoDB
Insecta	Hymenoptera	<i>Melipona quadrifasciata</i>	UV1	MQUAD:001bf8	OrthoDB
Insecta	Hymenoptera	<i>Melipona quadrifasciata</i>	LW1	MQUAD:0017d6	OrthoDB
Insecta	Hymenoptera	<i>Melipona quadrifasciata</i>	LW1	MQUAD:0017d7	OrthoDB
Insecta	Hymenoptera	<i>Melipona quadrifasciata</i>	SW1	MQUAD:001b71	OrthoDB
Insecta	Hymenoptera	<i>Cotesia vestalis</i>	SWS	APY20529.1	Genbank
Insecta	Hymenoptera	<i>Cotesia vestalis</i>	LW2	APY20526.1	Genbank
Insecta	Hymenoptera	<i>Cotesia vestalis</i>	LW1	APY20528.1	Genbank
Insecta	Hymenoptera	<i>Cotesia vestalis</i>	UVS	APY20527.1	Genbank
Insecta	Hymenoptera	<i>Fopius arisanus</i>	UV1	6707570	OrthoDB
Insecta	Hymenoptera	<i>Fopius arisanus</i>	LW1	6707104	OrthoDB
Insecta	Hymenoptera	<i>Fopius arisanus</i>	LW2	6713149	OrthoDB
Insecta	Hymenoptera	<i>Fopius arisanus</i>	SW1	6712580	OrthoDB
Insecta	Hymenoptera	<i>Diachasma alloeum</i>	UV1	XP_015115701.1	Genbank
Insecta	Hymenoptera	<i>Diachasma alloeum</i>	LW1	XP_015110387.1	Genbank
Insecta	Hymenoptera	<i>Diachasma alloeum</i>	LW2	XP_015110385.1	Genbank
Insecta	Hymenoptera	<i>Diachasma alloeum</i>	SW1	XP_015116842.1	Genbank
Insecta	Hymenoptera	<i>Microplitis demolitor</i>	UV1	XP_008551484.1	Genbank
Insecta	Hymenoptera	<i>Microplitis demolitor</i>	LW1	XP_008557309.1	Genbank
Insecta	Hymenoptera	<i>Microplitis demolitor</i>	LW2	XP_008557308.1	Genbank
Insecta	Hymenoptera	<i>Microplitis demolitor</i>	SW1	XP_014297257.1	Genbank
Insecta	Hymenoptera	<i>Cephus cinctus</i>	UV1	CCINC:0000f9	OrthoDB
Insecta	Hymenoptera	<i>Cephus cinctus</i>	LW1	CCINC:000859	OrthoDB
Insecta	Hymenoptera	<i>Cephus cinctus</i>	LW1	CCINC:00291a	OrthoDB
Insecta	Hymenoptera	<i>Cephus cinctus</i>	SW1	CCINC:0006bf	OrthoDB
Insecta	Hymenoptera	<i>Chrysis viridula</i>	UVS	APY20525.1	Genbank
Insecta	Hymenoptera	<i>Chrysis viridula</i>	SWS	APY20524.1	Genbank
Insecta	Hymenoptera	<i>Chrysis viridula</i>	LWS	APY20523.1	Genbank
Insecta	Hymenoptera	<i>Copidosoma floridanum</i>	LW1	CFLO011095	OrthoDB
Insecta	Hymenoptera	<i>Copidosoma floridanum</i>	SW1	CFLO009114	OrthoDB
Insecta	Hymenoptera	<i>Copidosoma floridanum</i>	LWS opsin 2 predicted	XP_023246947.1	Genbank
Insecta	Hymenoptera	<i>Copidosoma floridanum</i>	UVS predicted opsin	XP_014218019.1	Genbank
Insecta	Hymenoptera	<i>Leptopilina clavipes</i>	LW2	APY20531.1	Genbank

Insecta	Hymenoptera	<i>Leptopilina clavipes</i>	LW1	APY20532.1	Genbank
Insecta	Hymenoptera	<i>Leptopilina clavipes</i>	UVS	APY20533.1	Genbank
Insecta	Hymenoptera	<i>Leptopilina clavipes</i>	SWS opsin 1 partial	APY20530.1	Genbank
Insecta	Hymenoptera	<i>Acromyrmex echinator</i>	UV1	AECH14675	OrthoDB
Insecta	Hymenoptera	<i>Acromyrmex echinator</i>	LWS	AECH18073	OrthoDB
Insecta	Hymenoptera	<i>Acromyrmex echinator</i>	LWS	AECH18074	OrthoDB
Insecta	Hymenoptera	<i>Acromyrmex echinator</i>	SW1	AECH19964	OrthoDB
Insecta	Hymenoptera	<i>Atta cephalotes</i>	UV1	ACEP24081	OrthoDB
Insecta	Hymenoptera	<i>Atta cephalotes</i>	LWS	ACEP19443	OrthoDB
Insecta	Hymenoptera	<i>Atta cephalotes</i>	LWS	ACEP19445	OrthoDB
Insecta	Hymenoptera	<i>Atta cephalotes</i>	SW1	ACEP24672	OrthoDB
Insecta	Hymenoptera	<i>Camponotus floridanus</i>	UV1	CFLO14976	OrthoDB
Insecta	Hymenoptera	<i>Camponotus floridanus</i>	LW1	CFLO13350	OrthoDB
Insecta	Hymenoptera	<i>Camponotus floridanus</i>	LW1	CFLO13353	OrthoDB
Insecta	Hymenoptera	<i>Camponotus floridanus</i>	SW1	CFLO18506	OrthoDB
Insecta	Hymenoptera	<i>Camponotus atriceps</i>	LW1	Q17292.1	Genbank
Insecta	Hymenoptera	<i>Camponotus atriceps</i>	UV1	AAC05092.1	Genbank
Insecta	Hymenoptera	<i>Camponotus rufipes</i>	LW2	KT261378	Genbank
Insecta	Hymenoptera	<i>Camponotus rufipes</i>	UV	KT261377	Genbank
Insecta	Hymenoptera	<i>Camponotus rufipes</i>	SWS	KT261376.1	Genbank
Insecta	Hymenoptera	<i>Cardiocondyla obscurior</i>	UV1	Cobs_00666	OrthoDB
Insecta	Hymenoptera	<i>Cardiocondyla obscurior</i>	LW1	Cobs_07608	OrthoDB
Insecta	Hymenoptera	<i>Cardiocondyla obscurior</i>	SWS	Cobs_14313	OrthoDB
Insecta	Hymenoptera	<i>Cataglyphis bombycinus</i>	LW1	Q17296.1	Genbank
Insecta	Hymenoptera	<i>Cataglyphis bombycinus</i>	UV1	AAC05091.1	Genbank
Insecta	Hymenoptera	<i>Cerapachys biroi</i>	UV1	EZA56359.1	OrthoDB
Insecta	Hymenoptera	<i>Cerapachys biroi</i>	LW1	EZA56726.1	OrthoDB
Insecta	Hymenoptera	<i>Cerapachys biroi</i>	SW1	EZA48811.1	OrthoDB
Insecta	Hymenoptera	<i>Harpegnathos saltator</i>	UV1	HSAL22349	OrthoDB
Insecta	Hymenoptera	<i>Harpegnathos saltator</i>	LW1	HSAL18590	OrthoDB
Insecta	Hymenoptera	<i>Harpegnathos saltator</i>	LW1	HSAL18599	OrthoDB
Insecta	Hymenoptera	<i>Harpegnathos saltator</i>	SW1	EFN81524.1	Genbank
Insecta	Hymenoptera	<i>Linepithema humile</i>	UV1	LH19353	OrthoDB
Insecta	Hymenoptera	<i>Linepithema humile</i>	LWS	LH12072	OrthoDB
Insecta	Hymenoptera	<i>Linepithema humile</i>	LWS	LH12077	OrthoDB
Insecta	Hymenoptera	<i>Linepithema humile</i>	SW1	LH20507	OrthoDB
Insecta	Hymenoptera	<i>Monomorium pharaonis</i>	UV1	3491790468	OrthoDB
Insecta	Hymenoptera	<i>Monomorium pharaonis</i>	LW1	2754645108	OrthoDB
Insecta	Hymenoptera	<i>Monomorium pharaonis</i>	LW2	2754645156	OrthoDB
Insecta	Hymenoptera	<i>Monomorium pharaonis</i>	SW1	7178555668	OrthoDB
Insecta	Hymenoptera	<i>Pogonomyrmex barbatus</i>	UV1	PB27190	OrthoDB
Insecta	Hymenoptera	<i>Pogonomyrmex barbatus</i>	LW1	PB12069	OrthoDB
Insecta	Hymenoptera	<i>Pogonomyrmex barbatus</i>	LW1	PB27366	OrthoDB
Insecta	Hymenoptera	<i>Pogonomyrmex barbatus</i>	SW1	PB20309	OrthoDB
Insecta	Hymenoptera	<i>Solenopsis invicta</i>	LW2	SINV11463	OrthoDB

Insecta	Hymenoptera	<i>Solenopsis invicta</i>	LW1	XP_011164467.1	Genbank
Insecta	Hymenoptera	<i>Solenopsis invicta</i>	Predicted UV	XP_011164985.1	Genbank
Insecta	Hymenoptera	<i>Solenopsis invicta</i>	SW1	SINV24180	OrthoDB
Insecta	Hymenoptera	<i>Vollenhovia emeryi</i>	LW1	19044600	OrthoDB
Insecta	Hymenoptera	<i>Vollenhovia emeryi</i>	LW1	19044602	OrthoDB
Insecta	Hymenoptera	<i>Vollenhovia emeryi</i>	SW1	19029100	OrthoDB
Insecta	Hymenoptera	<i>Vollenhovia emeryi</i>	UVS	19044702	OrthoDB
Insecta	Hymenoptera	<i>Wasmannia auropunctata</i>	LW1	23041445	OrthoDB
Insecta	Hymenoptera	<i>Wasmannia auropunctata</i>	LW1	23055722	OrthoDB
Insecta	Hymenoptera	<i>Wasmannia auropunctata</i>	LW1	23055723	OrthoDB
Insecta	Hymenoptera	<i>Wasmannia auropunctata</i>	SW1	23064534	OrthoDB
Insecta	Hymenoptera	<i>Wasmannia auropunctata</i>	UVS	23049187	OrthoDB
Insecta	Hymenoptera	<i>Dufourea novaeangliae</i>	UV1	DNOVA:0009a7	OrthoDB
Insecta	Hymenoptera	<i>Dufourea novaeangliae</i>	LW1	DNOVA:000951	OrthoDB
Insecta	Hymenoptera	<i>Dufourea novaeangliae</i>	LW1	DNOVA:000952	OrthoDB
Insecta	Hymenoptera	<i>Dufourea novaeangliae</i>	SW1	DNOVA:001188	OrthoDB
Insecta	Hymenoptera	<i>Lasioglossum albipes</i>	UV1	Lalb_06455	OrthoDB
Insecta	Hymenoptera	<i>Lasioglossum albipes</i>	LW1	Lalb_06990	OrthoDB
Insecta	Hymenoptera	<i>Lasioglossum albipes</i>	LW1	Lalb_06991	OrthoDB
Insecta	Hymenoptera	<i>Lasioglossum albipes</i>	SW1	Lalb_13064	OrthoDB
Insecta	Hymenoptera	<i>Megachile rotundata</i>	UV1	MROTU:002d33	OrthoDB
Insecta	Hymenoptera	<i>Megachile rotundata</i>	LW1	MROTU:00205f	OrthoDB
Insecta	Hymenoptera	<i>Megachile rotundata</i>	LW1	MROTU:002060	OrthoDB
Insecta	Hymenoptera	<i>Megachile rotundata</i>	SW1	MROTU:001111	OrthoDB
Insecta	Hymenoptera	<i>Osmia rufa</i>	LWRh1	AY572828	OrthoDB
Insecta	Hymenoptera	<i>Osmia rufa</i>	LWRh2	AY572829	OrthoDB
Insecta	Hymenoptera	<i>Orussus abietinus</i>	UV1	OABI008892	OrthoDB
Insecta	Hymenoptera	<i>Orussus abietinus</i>	LW1	OABI006433	OrthoDB
Insecta	Hymenoptera	<i>Orussus abietinus</i>	LW1	OABI006436	OrthoDB
Insecta	Hymenoptera	<i>Orussus abietinus</i>	SW1	OABI004912	OrthoDB
Insecta	Hymenoptera	<i>Nasonia vitripennis</i>	UV1	Nasvi2EG000990	OrthoDB
Insecta	Hymenoptera	<i>Nasonia vitripennis</i>	LW1	Nasvi2EG003379	OrthoDB
Insecta	Hymenoptera	<i>Nasonia vitripennis</i>	LW1	Nasvi2EG003380	OrthoDB
Insecta	Hymenoptera	<i>Nasonia vitripennis</i>	SW1	Nasvi2EG004208	OrthoDB
Insecta	Hymenoptera	<i>Sirex noctilio</i>	LW1	MW340973	Genbank
Insecta	Hymenoptera	<i>Sirex noctilio</i>	LW2	MW340972	Genbank
Insecta	Hymenoptera	<i>Sirex noctilio</i>	UVS	MW340974	Genbank
Insecta	Hymenoptera	<i>Neodiprion lecontei</i>	UV1	XP_015524256.1	Genbank
Insecta	Hymenoptera	<i>Neodiprion lecontei</i>	LW1	XP_015510992.1	Genbank
Insecta	Hymenoptera	<i>Neodiprion lecontei</i>	LW2	XP_015510994.1	Genbank
Insecta	Hymenoptera	<i>Neodiprion lecontei</i>	SW1	XP_015516920.1	Genbank
Insecta	Hymenoptera	<i>Athalia rosae</i>	UV1	AROS003931	OrthoDB
Insecta	Hymenoptera	<i>Athalia rosae</i>	LW2	XP_012261693.1	Genbank
Insecta	Hymenoptera	<i>Athalia rosae</i>	LW1	AROS000476	OrthoDB
Insecta	Hymenoptera	<i>Athalia rosae</i>	SW1	AROS010079	OrthoDB

Insecta	Hymenoptera	<i>Tenthredo koehleri</i>	UVS	APY20540.1	Genbank
Insecta	Hymenoptera	<i>Tenthredo koehleri</i>	LWS	APY20539.1	Genbank
Insecta	Hymenoptera	<i>Tenthredo koehleri</i>	SWS	APY20538.1	Genbank
Insecta	Hymenoptera	<i>Trichogramma pretiosum</i>	UV1	TPRE005600	OrthoDB
Insecta	Hymenoptera	<i>Trichogramma pretiosum</i>	LW1	TPRE005398	OrthoDB
Insecta	Hymenoptera	<i>Trichogramma pretiosum</i>	LW1	TPRE009663	OrthoDB
Insecta	Hymenoptera	<i>Trichogramma pretiosum</i>	SW1	TPRE003427	OrthoDB
Insecta	Hymenoptera	<i>Polistes dominula</i>	UV1	PdomMRNAr1.2-02384	OrthoDB
Insecta	Hymenoptera	<i>Polistes dominula</i>	LW1	PdomMRNAr1.2-04382	OrthoDB
Insecta	Hymenoptera	<i>Polistes dominula</i>	LW1	PdomMRNAr1.2-05518	OrthoDB
Insecta	Hymenoptera	<i>Polistes dominula</i>	SW1	PdomMRNAr1.2-11069	OrthoDB
Insecta	Blattodea	<i>Zootermopsis nevadensis</i>	LW	XP_021916766.1	Genbank
Insecta	Blattodea	<i>Zootermopsis nevadensis</i>	UV	XP_021938920.1	Genbank
Insecta	Lepidoptera	<i>Chilo suppressalis</i>	LWS	CSUOGS105437-PA	OrthoDB
Insecta	Lepidoptera	<i>Chilo suppressalis</i>	UVS opsin partial	CSUOGS103387-PA	OrthoDB
Insecta	Lepidoptera	<i>Chilo suppressalis</i>	UVS opsin partial	CSUOGS104341-PA	OrthoDB
Insecta	Lepidoptera	<i>Chilo suppressalis</i>	SWS	CSUOGS106507	OrthoDB
Insecta	Lepidoptera	<i>Danaus plexippus</i>	LWS	AY605545	Genbank
Insecta	Lepidoptera	<i>Danaus plexippus</i>	SWS	AY605544	Genbank
Insecta	Lepidoptera	<i>Danaus plexippus</i>	UVS	AY605546	Genbank
Insecta	Lepidoptera	<i>Heliconius erato</i>	LWS	AY918907	Genbank
Insecta	Lepidoptera	<i>Heliconius erato</i>	SWS	AAAY16539.1	Genbank
Insecta	Lepidoptera	<i>Heliconius erato</i>	UV1	AAAY16537.1	Genbank
Insecta	Lepidoptera	<i>Heliconius erato</i>	UV2	AAAY16538.2	Genbank
Insecta	Lepidoptera	<i>Heliconius melpomene</i>	LWS	GU324702	Genbank
Insecta	Lepidoptera	<i>Heliconius melpomene</i>	SWS	GU324689	Genbank
Insecta	Lepidoptera	<i>Heliconius melpomene</i>	UV1	GU324678	Genbank
Insecta	Lepidoptera	<i>Heliconius melpomene</i>	UV2	GU324679	Genbank
Insecta	Lepidoptera	<i>Heliconius sapho</i>	LWS	GU324705	Genbank
Insecta	Lepidoptera	<i>Heliconius sapho</i>	SWS	GU324692	Genbank
Insecta	Lepidoptera	<i>Heliconius sapho</i>	UV1	GQ451907	Genbank
Insecta	Lepidoptera	<i>Heliconius sapho</i>	UV2	GQ451908	Genbank
Insecta	Lepidoptera	<i>Vanessa cardui</i>	LWS	AF385333.2	Genbank
Insecta	Lepidoptera	<i>Vanessa cardui</i>	SWS	AF414075.2	Genbank
Insecta	Lepidoptera	<i>Vanessa cardui</i>	UVS	AF414074.2	Genbank
Insecta	Lepidoptera	<i>Spodoptera litura</i>	UVS	AHA48204.1	Genbank
Insecta	Lepidoptera	<i>Spodoptera litura</i>	LW1	ALL74040.1	Genbank
Insecta	Lepidoptera	<i>Spodoptera litura</i>	LW2	AHA48193.1	Genbank
Insecta	Lepidoptera	<i>Spodoptera litura</i>	SWS	AHA48181.1	Genbank
Insecta	Lepidoptera	<i>Spodoptera exigua</i>	LW2	AHA48192.1	Genbank
Insecta	Lepidoptera	<i>Spodoptera exigua</i>	SWS	AHA48180.1	Genbank
Insecta	Lepidoptera	<i>Spodoptera exigua</i>	LW1	AAL59877.1	Genbank
Insecta	Lepidoptera	<i>Spodoptera exigua</i>	UVS	AHA48203.1	Genbank
Insecta	Lepidoptera	<i>Papilio xuthus</i>	LWS opsin Rh1	AB007423	Genbank
Insecta	Lepidoptera	<i>Papilio xuthus</i>	LWS opsin Rh2	AB007424	Genbank

Insecta	Lepidoptera	<i>Papilio xuthus</i>	LWS opsin Rh3	AB007425	Genbank
Insecta	Lepidoptera	<i>Papilio xuthus</i>	SWS opsin Rh4	BAA93469.1	Genbank
Insecta	Lepidoptera	<i>Papilio xuthus</i>	UVS opsin Rh5 partial	BAA93470.1	Genbank
Insecta	Lepidoptera	<i>Pieris rapae</i>	LW1	AB177984	Genbank
Insecta	Lepidoptera	<i>Pieris rapae</i>	SWS	AB208675	Genbank
Insecta	Lepidoptera	<i>Pieris rapae</i>	UVS	AB208673	Genbank
Insecta	Lepidoptera	<i>Macroglossum stellatarum</i>	LWS	KF539444	Genbank
Insecta	Lepidoptera	<i>Macroglossum stellatarum</i>	SWS	KF539426	Genbank
Insecta	Lepidoptera	<i>Macroglossum stellatarum</i>	UVS	KF539456	Genbank
Insecta	Lepidoptera	<i>Manduca sexta</i>	LWS	L78080	Genbank
Insecta	Lepidoptera	<i>Manduca sexta</i>	SWS	AD001674	Genbank
Insecta	Lepidoptera	<i>Manduca sexta</i>	UVS	L78081	Genbank
Insecta	Lepidoptera	<i>Heliconius sara</i>	LWS partial	ART30092.1	Genbank
Insecta	Lepidoptera	<i>Heliconius sara</i>	SWS	ART30093.1	Genbank
Insecta	Lepidoptera	<i>Heliconius sara</i>	UV1	ART30094.1	Genbank
Insecta	Lepidoptera	<i>Heliconius sara</i>	UV2	ART30095.1	Genbank
Insecta	Lepidoptera	<i>Heliconius numata</i>	LWS partial	ADN96767.1	Genbank
Insecta	Lepidoptera	<i>Heliconius numata</i>	SWS	ADN96754.1	Genbank
Insecta	Lepidoptera	<i>Heliconius numata</i>	UV1	ADD13987.1	Genbank
Insecta	Lepidoptera	<i>Heliconius numata</i>	UV2	ADD13986.1	Genbank
Insecta	Lepidoptera	<i>Galleria mellonella</i>	LWS partial	AF385330	Genbank
Insecta	Lepidoptera	<i>Amyelois transitella</i>	LWS	XP_013194996.1	Genbank
Insecta	Lepidoptera	<i>Amyelois transitella</i>	SWS	XP_013192766.1	Genbank
Insecta	Lepidoptera	<i>Amyelois transitella</i>	UVS	XP_013190475.1	Genbank
Insecta	Lepidoptera	<i>Junonia coenia</i>	LWS partial	AF385332.1	Genbank
Insecta	Lepidoptera	<i>Siproeta stelenes</i>	LWS partial	AY740908.1	Genbank
Insecta	Lepidoptera	<i>Inachis io</i>	LWS partial	AY740906.1	Genbank
Insecta	Lepidoptera	<i>Nymphalis antiopa</i>	LW partial	AY740907.1	Genbank
Insecta	Lepidoptera	<i>Nymphalis antiopa</i>	LW2	AA16525.1	Genbank
Insecta	Lepidoptera	<i>Nymphalis antiopa</i>	SWS	AA16526.1	Genbank
Insecta	Lepidoptera	<i>Nymphalis antiopa</i>	UVS	AAU93395.1	Genbank
Insecta	Mecoptera	<i>Panorpa vulgaris</i>	LWA	C93846_a_8_0_l_1434	Böhm et al 2018
Insecta	Mecoptera	<i>Panorpa vulgaris</i>	LWB	C93408_a_50_0_l_1392	Böhm et al 2018
Insecta	Mecoptera	<i>Panorpa vulgaris</i>	SW	s4047_L_7101_0_a_88_0_l_1526	Böhm et al 2018
Insecta	Mecoptera	<i>Panorpa vulgaris</i>	UV	C93604_a_46_0_l_1409	Böhm et al 2018
Insecta	Mecoptera	<i>Panorpa communis</i>	SW	transcript-60_8324	Böhm et al 2018
Insecta	Mecoptera	<i>Panorpa communis</i>	LWA	transcript-60_4988	Böhm et al 2018
Insecta	Mecoptera	<i>Panorpa communis</i>	LWB	transcript-60_7527	Böhm et al 2018
Insecta	Mecoptera	<i>Panorpa communis</i>	UV	transcript-60_2273	Böhm et al 2018
Insecta	Mecoptera	<i>Nannochorista dipteroides (larvae)</i>	LWB	C143921_a_63_0_l_1706	Böhm et al 2018
Insecta	Mecoptera	<i>Nannochorista dipteroides (larvae)</i>	UV	s1018_L_1039_0_a_9_2_l_1201	Böhm et al 2018
Insecta	Mecoptera	<i>Nannochorista philpotti (larvae)</i>	LWB	GADB01000862.1	Böhm et al 2018
Insecta	Mecoptera	<i>Nannochorista philpotti (larvae)</i>	UV	GADB01001896.1	Böhm et al 2018
Insecta	Mecoptera	<i>Nannochorista philpotti (larvae)</i>	SW	GADB01024620.1	Böhm et al 2018
Insecta	Mecoptera	<i>Chorista australis</i>	LWA	C139150_a_45_0_l_2140	Böhm et al 2018

Insecta	Mecoptera	<i>Chorista australis</i>	LWB	C137380_a_61_0_l_1845	Böhm et al 2018
Insecta	Mecoptera	<i>Chorista australis</i>	UV	s9206_l_37046_0_a_63_4_l_2315	Böhm et al 2018
Insecta	Mecoptera	<i>Chorista australis</i>	SW	s6001_l_12778_0_a_71_5_l_1564	Böhm et al 2018
Insecta	Mecoptera	<i>Boreus hyemalis</i>	LWA	s11633_l_26973_0_a_10_6_l_160	Böhm et al 2018
Insecta	Mecoptera	<i>Boreus hyemalis</i>	LWB	C177846_a_85_0_l_1336	Böhm et al 2018
Insecta	Mecoptera	<i>Boreus hyemalis</i>	UV	s3694_l_3777_0_a_55_0_l_2104	Böhm et al 2018
Insecta	Mecoptera	<i>Boreus hyemalis</i>	SW	C179726_a_58_0_l_1509	Böhm et al 2018
Insecta	Mecoptera	<i>Harpobittacus australis</i>	LWA	s6703_l_31159_0_a_8_3_l_2437	Böhm et al 2018
Insecta	Mecoptera	<i>Harpobittacus australis</i>	LWB	s1065_l_1371_0_a_73_4_l_1782	Böhm et al 2018
Insecta	Mecoptera	<i>Harpobittacus australis</i>	UV	C125631_a_64_0_l_1514	Böhm et al 2018
Insecta	Mecoptera	<i>Harpobittacus australis</i>	SW	C128023_a_61_0_l_2053	Böhm et al 2018
Insecta	Mecoptera	<i>Caurinus tlagu</i>	LWB	s3195_l_15063_0_a_65_5_l_2111	Böhm et al 2018
Insecta	Mecoptera	<i>Caurinus tlagu</i>	UV	C76851_a_48_0_l_1437	Böhm et al 2018
Insecta	Mecoptera	<i>Caurinus tlagu</i>	SW	C77029_a_64_0_l_1461	Böhm et al 2018
Insecta	Neuroptera	<i>Pseudomallada prasinus</i>	UVS	APY20658.1	Genbank
Insecta	Neuroptera	<i>Pseudomallada prasinus</i>	LWS	APY20657.1	Genbank
Insecta	Neuroptera	<i>Euroleon nostras</i>	UVS	APY20603.1	Genbank
Insecta	Neuroptera	<i>Euroleon nostras</i>	LWS	APY20602.1	Genbank
Insecta	Neuroptera	<i>Osmylus fulvicephalus</i>	LWS	APY20642.1	Genbank
Insecta	Neuroptera	<i>Osmylus fulvicephalus</i>	UVS partial	APY20641.1	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWA1	LC009204	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWA2	LC009205	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWB1	LC009206	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWB2	LC009207	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWC1	LC009208	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE1	LC009209	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE10	LC009210	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE11	LC009211	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE12	LC009212	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE13	LC009213	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE14	LC009214	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE15	LC009215	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE16	LC009216	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE2	LC009217	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE3	LC009218	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE4	LC009219	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE5	LC009220	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE6	LC009221	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE7	LC009222	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE8	LC009223	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhLWE9	LC009224	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhSWa1	LC009225	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhSWa2	LC009226	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhSWb1	LC009227	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhSWc1	LC009228	Genbank

Insecta	Odonata	<i>Anax parthenope</i>	RhSWc2	LC009229	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhSWc3	LC009230	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhSWc4	LC009231	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhSWc5	LC009232	Genbank
Insecta	Odonata	<i>Anax parthenope</i>	RhUV	LC009233	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWA1	LC009277	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWA2	LC009278	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWC1	LC009279	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWD1	LC009280	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWE1	LC009281	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWF1	LC009282	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWF2	LC009283	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWF3	LC009284	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhLWF4	LC009285	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhSWb1	LC009286	Genbank
Insecta	Odonata	<i>Mnais costalis</i>	RhUV	LC009287	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWA1	LC009261	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWA2	LC009262	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWC1	LC009263	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWD1	LC009264	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWE1	LC009265	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWF1	LC009266	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWF2	LC009267	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWF3	LC009268	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhLWF4	LC009269	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhSWb1	LC009270	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhSWb2	LC009271	Genbank
Insecta	Odonata	<i>Ischnura asiatica</i>	RhUV	LC009272	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWA1	LC009149	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWA2	LC009150	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWB1	LC009151	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWC1	LC009152	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWC2	LC009153	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWE1	LC009154	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWF1	LC009155	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWF2	LC009156	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWF3	LC009157	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWF4	LC009158	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhLWF5	LC009159	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhSWb1	LC009160	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhSWc1	LC009161	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhSWc2	LC009162	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhSWc3	LC009163	Genbank
Insecta	Odonata	<i>Anotogaster sieboldii</i>	RhUV	LC009164	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWA1	LC009100	Genbank

Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWA2	LC009101	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWB1	LC009102	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWC1	LC009103	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWD1	LC009104	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWE1	LC009105	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWE2	LC009106	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWE3	LC009107	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWF1	LC009108	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWF2	LC009109	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWF3	LC009110	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWF4	LC009111	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhLWF5	LC009112	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhSWA1	LC009113	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhSWB1	LC009114	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhSWC1	LC009115	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhSWC2	LC009116	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhSWC3	LC009117	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhSWC4	LC009118	Genbank
Insecta	Odonata	<i>Somatochlora uchidai</i>	RhUV	LC009119	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWA1	LC009238	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWA2	LC009239	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWB1	LC009240	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWC1	LC009241	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWD1	LC009242	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWE1	LC009243	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWF1	LC009244	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWF2	LC009245	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWF3	LC009246	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWF4	LC009247	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhLWF5	LC009248	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhSWa1	LC009249	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhSWc1	LC009250	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhSWc2	LC009251	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhSWc3	LC009252	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhSWc4	LC009253	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhSWc5	LC009254	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhSWc6	LC009255	Genbank
Insecta	Odonata	<i>Epiophlebia superstes</i>	RhUV	LC009256	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWA1	LC009187	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWA2	LC009188	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWC1	LC009189	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWE1	LC009190	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWF1	LC009191	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWF2	LC009192	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWF3	LC009193	Genbank

Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWF4	LC009194	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWF5	LC009195	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhLWF6	LC009196	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhSWb1	LC009197	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhSWc1	LC009198	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhSWc2	LC009199	Genbank
Insecta	Odonata	<i>Asiagomphus melaenops</i>	RhUV	LC009200	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWA1	LC009292	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWA2	LC009293	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWC1	LC009294	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWD1	LC009295	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWD2	LC009296	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWE1	LC009297	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWE2	LC009298	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	LWS opsin RhLWF1	LC009299	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	SWS opsin RhLWA1	LC009300	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	SWS opsin RhLWB1	LC009301	Genbank
Insecta	Odonata	<i>Indolestes peregrinus</i>	UVS opsin RhUV	LC009302	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWF1	FAA01182.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWC1	FAA01174.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWf2	FAA01178.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWd1	FAA01175.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWb1	FAA01173.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWf3	FAA01181.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWa1	FAA01170.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWf4	FAA01179.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWe1	FAA01176.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWa2	FAA01172.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	LWf5	FAA01180.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	UVS	FAA01188.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	SWb	FAA01184.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	SWc2	FAA01186.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	Swc1	FAA01185.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	SWc3	FAA01187.1	Genbank
Insecta	Odonata	<i>Ladona fulva</i>	SWa	FAA01183.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWA1	LC009080.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWA2	LC009081.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWB1	LC009082.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWC1	LC009083.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWD1	LC009084.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWE1	LC009085.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWF1	LC009086.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWF2	LC009087.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWF3	LC009088.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	LWS opsin RhLWF4	LC009089.1	Genbank

Insecta	Odonata	<i>Orthetrum albistylum</i>	SWS opsin RhSWA1	LC009090.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	SWS opsin RhSWB1	LC009091.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	SWS opsin RhSWC1	LC009092.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	SWS opsin RhSWC2	LC009093.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	SWS opsin RhSWC3	LC009094.1	Genbank
Insecta	Odonata	<i>Orthetrum albistylum</i>	UVS opsin RhUV	LC009095.1	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWA1	LC009060	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWA2	LC009061	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWB1	LC009062	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWC1	LC009063	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWD1	LC009064	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWE1	LC009065	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWF1	LC009066	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWF2	LC009067	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWF3	LC009068	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	LWS opsin RhLWF4	LC009069	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	SWS opsin RhSWA1	LC009070	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	SWS opsin RhSWB1	LC009071	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	SWS opsin RhSWC1	LC009072	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	SWS opsin RhSWC2	LC009073	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	SWS opsin RhSWC3	LC009074	Genbank
Insecta	Odonata	<i>Sympetrum frequens</i>	UVS opsin RhUV	LC009075	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWA1	LC009124	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWA2	LC009125	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWB1	LC009126	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWC1	LC009127	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWD1	LC009128	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWE1	LC009129	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWE2	LC009130	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWE3	LC009131	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWE4	LC009132	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWF1	LC009133	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWF2	LC009134	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWF3	LC009135	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWF4	LC009136	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhLWF5	LC009137	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhSWA1	LC009138	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhSWB1	LC009139	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhSWC1	LC009140	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhSWC2	LC009141	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhSWC3	LC009142	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhSWC4	LC009143	Genbank
Insecta	Odonata	<i>Macromia amphigena</i>	RhUV	LC009144	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWA1	LC009169	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWA2	LC009170	Genbank

Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWC1	LC009171	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWC2	LC009172	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWD1	LC009173	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWF1	LC009174	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWF2	LC009175	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWF3	LC009176	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWF4	LC009177	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhLWF5	LC009178	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhSWb1	LC009179	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhSWc1	LC009180	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhSWc2	LC009181	Genbank
Insecta	Odonata	<i>Tanypteryx pryeri</i>	RhUV	LC009182	Genbank
Insecta	orthoptera	<i>Locusta migratoria</i>	UVS	JAMg_model_9512.1	i5k
Insecta	orthoptera	<i>Locusta migratoria</i>	LWS	JAMg_model_2105	i5k
Insecta	orthoptera	<i>Locusta migratoria</i>	SWS	JAMg_model_298	i5k
Insecta	orthoptera	<i>Dianemobius nigrofasciatus</i>	LWS	FJ232921	Genbank
Insecta	orthoptera	<i>Dianemobius nigrofasciatus</i>	SWS	AB291232	Genbank
Insecta	orthoptera	<i>Dianemobius nigrofasciatus</i>	UVS	AB458852	Genbank
Insecta	orthoptera	<i>Gryllus bimaculatus</i>	SWS opsin	HM363622	Genbank
Insecta	orthoptera	<i>Gryllus bimaculatus</i>	Green-sensitive opsin 1	HM363620	Genbank
Insecta	orthoptera	<i>Gryllus bimaculatus</i>	Green-sensitive opsin 2	HM363621	Genbank
Insecta	orthoptera	<i>Gryllus bimaculatus</i>	UVS opsin	HM363623	Genbank
Insecta	orthoptera	<i>Schistocerca gregaria</i>	LWS Lo1	CAA56377.1	Genbank
Insecta	orthoptera	<i>Schistocerca gregaria</i>	LWS Lo2	CAA56378.1	Genbank
Insecta	orthoptera	<i>Schistocerca gregaria</i>	UV	BAP16681.1	Genbank
Insecta	Phasmatodea	<i>Clitarchus hookeri</i>	UV	maker-scaffold5306-size164544-au	i5k
Insecta	Phasmatodea	<i>Clitarchus hookeri</i>	LW	maker-scaffold1871-size425123-au	i5k
Insecta	Psocodea	<i>Pediculus humanus corporis</i>	GPRop1	XP_002427337.1	Genbank
Insecta	Psocodea	<i>Pediculus humanus corporis</i>	GPRop2	XP_002422743.1	Genbank
Insecta	Raphidioptera	<i>Inocellia crassicornis</i>	UVS partial	APY20614.1	Genbank
Insecta	Raphidioptera	<i>Inocellia crassicornis</i>	LWS	APY20613.1	Genbank
Insecta	Raphidioptera	<i>Xanthostigma xanthostigma</i>	LW2	APY20679.1	Genbank
Insecta	Raphidioptera	<i>Xanthostigma xanthostigma</i>	LW1	APY20678.1	Genbank
Insecta	Raphidioptera	<i>Xanthostigma xanthostigma</i>	UV1	APY20677.1	Genbank
Insecta	Raphidioptera	<i>Xanthostigma xanthostigma</i>	UVS opsin 2 partial	APY20676.1	Genbank
Insecta	Siphonaptera	<i>Jellisonia</i> sp.	LWB	AY722623	Böhm et al 2018
Insecta	Siphonaptera	<i>Oropsylla silantiewi</i>	LWB1 + LWB2	GAWY01023024.1 + GAWY010023	Böhm et al 2018
Insecta	Siphonaptera	<i>Archaeopsylla erinacei</i>	LWB	GABB01000536.1	Böhm et al 2018
Insecta	Siphonaptera	<i>Ctenophthalmus agyrtes</i>	LWB	AY722624	Böhm et al 2018
Insecta	Siphonaptera	<i>Xenopsylla cheopis</i>	LWB	transcript-115_11602	Böhm et al 2018
Insecta	Siphonaptera	<i>Pulex irritans</i>	LWB	AY722621	Böhm et al 2018
Insecta	Siphonaptera	<i>Uropsylla tasmanica</i>	LWB	AY722622	Böhm et al 2018
Insecta	Strepsiptera	<i>Mengenilla moldrzyki</i>	LWS 1 partial	APY20625.1	Genbank
Insecta	Strepsiptera	<i>Mengenilla moldrzyki</i>	LWS 2	APY20624.1	Genbank
Insecta	Strepsiptera	<i>Mengenilla moldrzyki</i>	UVS partial	APY20623.1	Genbank

Insecta	Strepsiptera	<i>Stylops melittae</i>	LW	APY20669.1	Genbank
Insecta	Strepsiptera	<i>Stylops melittae</i>	LW	APY20670.1	Genbank
Insecta	Strepsiptera	<i>Xenos peckii</i>	UV	APP91293.1	Genbank
Insecta	Strepsiptera	<i>Xenos peckii</i>	LW	APP91294.1	Genbank
Insecta	Strepsiptera	<i>Xenos vesparum</i>	UV	APY20683.1	Genbank
Insecta	Strepsiptera	<i>Xenos vesparum</i>	LW6	APY20680.1	Genbank
Insecta	Strepsiptera	<i>Xenos vesparum</i>	LW5	APY20687.1	Genbank
Insecta	Strepsiptera	<i>Xenos vesparum</i>	LW4	APY20685.1	Genbank
Insecta	Strepsiptera	<i>Xenos vesparum</i>	LW3	APY20686.1	Genbank
Insecta	Strepsiptera	<i>Xenos vesparum</i>	LW2	APY20681.1	Genbank
Insecta	Strepsiptera	<i>Xenos vesparum</i>	LW1	APY20682.1	Genbank
Insecta	Trichoptera	<i>Limnephilus lunatus</i>	SWS	LLUN003073	OrthoDB
Insecta	Trichoptera	<i>Limnephilus lunatus</i>	LW1	LLUN004497	OrthoDB
Insecta	Trichoptera	<i>Limnephilus lunatus</i>	LW2	LLUN004498 + LLUN004499	OrthoDB
Insecta	Thysanoptera	<i>Frankliniella occidentalis</i>	LW2	FOCC004443-PA	i5K
Insecta	Thysanoptera	<i>Frankliniella occidentalis</i>	LW1	FOCC004442-PA	i5K
Insecta	Thysanoptera	<i>Frankliniella occidentalis</i>	UV	FOCC004048-PA	i5K
Insecta	Thysanoptera	<i>Frankliniella occidentalis</i>	LW3	XP_026285526.1	Genbank
Insecta	Thysanoptera	<i>Frankliniella occidentalis</i>	SW	XP_026273645.1	Genbank