

CHRISTOPHER T. IVEY, POCHOLO MARTINEZ, AND ROBERT WYATT. 2003. Variation in pollinator effectiveness in swamp milkweed, *Asclepias incarnata* (Apocynaceae). *American Journal of Botany* 90(2): 214-225.

Appendix. Species of insects observed foraging for nectar from flowers of *Asclepias incarnata* in the Shenandoah Valley of northern Virginia during 1995-97. Carriers of pollinia are indicated by "Y"; species not observed to carry pollinia are indicated by "N". Ruby-throated hummingbirds (*Archilochus colubris*) were also observed foraging on flowers but were not captured to check for pollinia.

Order	Family	Species	Pollinia
Coleoptera	Cantharidae	<i>Chauliognathus pennsylvanicus</i> (Degeer)	Y
	Cerambycidae	<i>Tetraopes melanurus</i> Schoenherr	Y
	Scarabaeidae	<i>Cotinus nitida</i> (L.)	Y
		<i>Popillia japonica</i> Newman	Y
Diptera	Calliphoridae	<i>Pollenia rudis</i> (Fabr.)	N
	Conopidae	<i>Physocephala</i> cf. <i>tibialis</i> (Say)	N
		<i>Physoconops</i> sp. 1	N
		<i>Physoconops</i> sp. 2	N
	Muscidae	<i>Musca</i> sp.	N
	Mydidae	<i>Mydas clavatus</i> (Drury)	Y
	Sarcophagidae	<i>Sarcophaga</i> sp.	N
	Syrphidae	<i>Platycheirus</i> sp	Y
	Tabanidae	<i>Tabanus</i> sp.	N
	Tachinidae	unidentified sp.	N
Hemiptera	Lygaeidae	<i>Lygaeus kalmii</i> Stal	N
	Phymatidae	<i>Phymata</i> sp.	N
	Reduviidae	<i>Apiomerus crassipes</i> (Fabr.)	Y

Hymenoptera	Andrenidae	<i>Andrena</i> sp.	Y
	Anthophoridae	<i>Melissodes b. bimaculata</i> (Lep.)	Y
		<i>Triepeolus</i> cf. <i>lunatus</i> (Say)	N
		<i>Xylocopa virginica</i> (L.)	Y
	Apidae	<i>Apis mellifera</i> (L.)	Y
		<i>Bombus bimaculatus</i> Cresson	Y
		<i>B. griseocollis</i> (Degeer)	Y
		<i>B. impatiens</i> Cresson	Y
		<i>B. nevadensis</i> Cresson	Y
		<i>B. pennsylvanicus</i> (Degeer)	Y
		<i>B. cf. vagans</i> Smith	Y
	Argidae	<i>Arge</i> sp.	Y
	Halictidae	<i>Augochlora pura</i> (Say)	N
		<i>Augochlorella</i> cf. <i>striata</i> (Provancher)	N
		<i>Augochloropsis metallica</i> (Fabr.)	N
		<i>Dialictus</i> sp.	N
	Pompilidae	<i>Anoplius</i> sp.	Y
		<i>Pepsis elegans</i> Lepeletier	Y
	Scolidae	<i>Scolia dubia</i> Say	Y
	Sphecidae	<i>Cerceris clypeata</i> Dahlbom	Y
		<i>C. compacta</i> Cresson	N
		<i>C. fumipennis</i> Say	Y
		<i>Sphecius sphecius</i> (Drury)	Y

		<i>Sphex ichneumoneus</i> (L.)	Y
		<i>S. cf. nudus</i> Fernald	Y
		<i>S. pensylvanicus</i> L.	Y
		<i>Tachytes crassus</i> Patton	Y
	Tiphiidae	<i>Myzinum carolinianum</i> (Panzer)	Y
	Vespidae	<i>Dolichovespula maculata</i> (L.)	Y
		<i>Polistes fuscatus</i> (Fabr.)	Y
		<i>Vespula</i> sp.	Y
Lepidoptera	Ctenuchidae	<i>Cisseps fulvicollis</i> (Hubner)	Y
	Hesperiidae	<i>Ancyloxypha numitor</i> (Fabr.)	N
		<i>Atalopedes campestris</i> (Boisduval)	N
		<i>Polites coras</i> (Cramer)	N
		<i>Thorybes bathyllus</i> (Smith)	Y
	Lycaenidae	<i>Everes conmynatus</i> (Godart)	N
		<i>Lycaena phlaeas</i> L.	N
		<i>Strymon melinus</i> (Hubner)	N
	Nymphalidae	<i>Asterocampa celtis</i> (Boisduval and LeConte)	N
		<i>Danaus plexippus</i> (L.)	Y
		<i>Euptoieta claudia</i> (Cramer)	N
		<i>Phyciodes tharos</i> (Drury)	N
		<i>Speyeria aphrodite</i> (Fabr.)	Y
	Pieridae	<i>Colias eurytheme</i> Boisduval	N

		<i>C. philodice</i> Godart	N
		<i>Pieris rapae</i> (L.)	Y
	Sesiidae	<i>Melittia cucurbitae</i> (Harris)	N
	Sphingidae	<i>Hemeris diffinis</i> Boisduval	Y
	Yponomeutidae	<i>Atteva punctella</i> (Cramer)	Y
	Papilionidae	<i>Papilio glaucus</i> L.	Y
		<i>P. polyxenes</i> Fabr.	Y
Neuroptera	Chrysopidae	<i>Chrysopa</i> sp.	N
