Taxonomy and reference of the samples used. (Accession numbers of the amplified fragment, when obtained, are indicated. Accession numbers in bold were used to perform the test of evolution of *ace-2* sequences (see text).)

infraorder	family	species	reference	accession *ace-2*	accession *ace-1*
Culicomorpha	Culicidae	*Culex annulirostris* Skuse	F. Renaud, personal communication	**AJ868294**	AJ865835
	Chironomidae	unknown	this study[a]	**AJ868295**	AJ866990
	Simuliidae	*Simulium ornatum* Meigen	this study[a]	—	AJ865836
	Ceratopogonidae	*Culicoides circumscriptus* Kieffer	J. C. Delécolle, personal communication	AJ868296	AJ865837
	Ceratopogonidae	*Culicoides salinarius* Kieffer	J. C. Delécolle, personal communication	AJ868297	AJ865838
	Ceratopogonidae	*Culicoides vexans* Staeger	J. C. Delécolle, personal communication	AJ868298	AJ865850
	Ceratopogonidae	*Culicoides riethi* Kieffer	J. C. Delécolle, personal communication	AJ868299	AJ865839
	Ceratopogonidae	*Culicoides newsteadi* Austen	J. C. Delécolle, personal communication	AJ868300	AJ865851
Bibionomorpha	Bibionidae	*Dilophus* sp.	this study[a]	AM159185	AJ865851
	Mycetophilidae	*Rymosia* sp1	this study[a]	AJ868301	—
	Mycetophilidae	*Rymosia* sp2	this study[a]	AJ868302	—
	Mycetophilidae	unknown	this study[a]	—	AJ865855
	Keroplatidae	unknown	this study[a]	AM159188	AJ865855
	Sciaridae	*Sciara* sp.	this study[a]	AJ865831	—
Psychodomorpha	Psychodidae	unknown	this study[a]	**AJ868303**	AJ865852
	Phlebotomidae	*Phlebotomus perniciosus* Newstead	this study[a]	AJ868305	AJ865853
	Scatopsidae	*Apiloscatopse* sp.	this study[a]	**AJ868305**	AJ865850
Tipulomorpha	Tipulidae	*Tipula* sp.	this study[a]	**AJ865830**	AJ865855
Stratiomyomorpha	Stratiomyidae	*Pachygaster atra* (Panzer)	this study[a]	**AJ868306**	—
	Stratiomyidae	*Chorisops tunisiae* (Becker)	this study[a]	AM159186	AJ865858
Tabanomorpha	Tabanidae	*Tabanus bromius* Linnaeus	this study[a]	—	AJ865856
Asilomorpha	Scenopinidae	*Scenopinus fenestralis* (Linnaeus)	this study[a]	AJ868307	AJ865857
	Bombyliidae	*Hemipenthes morio* (Linnaeus)	this study[a]	AM159189	AJ865859
	Empididae	*Empis* sp.	this study[a]	AM159187	AJ865852
	Hybotidae	*Hybos femoratus* (Müller)	this study[a]	AM159192	AJ865853
Aschiza	Lonchopteridae	*Lonchoptera lutea* Panzer	this study[a]	**AJ868308**	—
	Syrphidae	*Eristalis tenax* (Linnaeus)	this study[a]	**AJ868309**	—
	Pipunculidae	unknown	this study[a]	AJ868310	—
Schizophora acalyptratae	Conopidae	*Thecophora pusilla* (Meigen)	this study[a]	AJ868311	—
	Psilidae	*Chamaepsila rosae* (Fabricius)	S. Gouinguené, personal communication[b]	AJ868312	—
	Diopsidae	*Diasemopsis signata* (Dalman)	A. Pomiankowski, personal communication	AJ868313	—
	Diopsidae	*Cyrtodiopsis dalmanii* (Wiedemann)	A. Pomiankowski, personal communication	AJ868315	—
	Diopsidae	*Sphyracephala beccarii* (Rondani)	A. Pomiankowski, personal communication	AJ868315	—
	Lonchaeidae	*Lonchaea* sp.	this study[a]	AJ868316	—
	Otitidae	*Dorycera graminum* (Fabricius)	this study[a]	AM159190	—
	Platystomatidae	*Platystoma lugubre* (Robineau-Desvoidy)	this study[a]	AM159191	—

(*Continued.*)

(*Continued*.)

infraorder	family	species	reference	accession *ace-2*	accession *ace-1*
	Tephritidae	*Bactrocera oleae* (Gmelin)	C. Caceres, personal communication[c]	Q8MVZ5[d]	—
	Opomyzidae	*Geomyza* sp.	this study[a]	AJ868317	—
	Agromyzidae	*Liriomyza trifolii* (Burgess)	this study[a]	AJ868318	—
	Asteiidae	*Asteia* sp.	this study[a]	AJ868319	—
	Sciomyzidae	*Trypetoptera punctulata* (Scopoli)	this study[a]	AJ868320	—
	Sepsidae	*Orygma luctuosum* Meigen	this study[a]	AJ868321	—
	Sepsidae	*Sepsis thoracica* Robineau-Desvoidy	G. Duvallet, personal communication	AJ868322	—
	Coelopidae	*Coelopa pilipes* Haliday	M. Valero, personal communication[a]	AJ865832	—
	Lauxanidae	*Sapromyza* sp.	this study[a]	**AJ868323**	—
	Lauxanidae	*Prosopomyia pallida* Loew	this study[a]	AJ868325	—
	Chamaemyidae	*Chamaemyia* sp.	this study[a]	AJ868325	—
	Chyromyidae	*Aphaniosoma* sp.	this study[a]	AJ868326	—
	Braulidae	*Braula coeca* Nitzsch	Y. Layec, personal communication[a]	AJ868327	—
	Tethinidae	*Horaismoptera vulpina* Hendel	this study[a]	AJ868328	—
	Milichiidae	*Desmometopa* sp.	this study[a]	AJ868329	—
	Chloropidae	unknown	this study[a]	AJ868330	—
	Drosophilidae	*Chymomyza amoena* (Loew)	R. Allemand, personal communication[e]	**AJ868331**	—
	Drosophilidae	*Zaprionus indianus* Gupta	R. Allemand, personal communication[e]	**AJ868332**	—
	Drosophilidae	*Drosophila willistoni* Sturtevant	R. Allemand, personal communication[e]	**AJ868333**	—
	Drosophilidae	*Drosophila subobscura* Collinin Gordon	R. Allemand, personal communication[e]	**AJ868335**	—
	Drosophilidae	*Drosophila hydei* Sturtevant	R. Allemand, personal communication[e]	**AJ868335**	—
	Drosophilidae	*Drosophila simulans* Sturtevant	R. Allemand, personal communication[e]	**AJ868336**	—
	Drosophilidae	*Drosophila immigrans* Sturtevant	R. Allemand, personal communication[e]	**AJ868337**	—
	Drosophilidae	*Drosophila busckii* Coquillett	R. Allemand, personal communication[e]	**AJ868338**	—
	Drosophilidae	*Drosophila funebris* (Fabricius)	R. Allemand, personal communication[e]	**AJ868339**	—
	Drosophilidae	*Scaptomyza pallida* (Zetterstedt)	R. Allemand, personal communication[e]	**AJ868350**	—
	Drosophilidae	*Scaptomyza* sp.	this study[a]	AJ868351	—
	Ephydridae	*Psilopa* sp.	this study[a]	AJ868352	—
	Ephydridae	*Scatella* sp.	this study[a]	AJ868353	—
	Ephydridae	*Hydrellia* sp.	this study[a]	AJ868355	—
Schizophora Calyptratae	Anthomyiidae	*Delia antiqua* (Meigen)	S. Gouinguené, personal communication[b]	AJ868355	—
	Muscidae	*Atherigona soccata* Rondani	this study[a]	**AJ868356**	—
	Muscidae	*Musca domestica* Linnaeus	J. G. Scott, personal communication[f]	**Q8MXC5**[g]	—
	Muscidae	*Musca vitripennis* Meigen	G. Duvallet, personal communication	**AJ868357**	—
	Muscidae	*Neomyia cornicina* (Fabricius)	G. Duvallet, personal communication	**AJ868358**	—
	Muscidae	*Coenosia* sp.	this study[a]	AJ868359	—
	Sarcophagidae	unknown	this study[a]	AJ868350	—
	Calliphoridae	*Lucilia* sp.	A. Callaghan, personal communication	**P91955**[h]	—
	Calliphoridae	*Chrysomya albiceps* (Wiedemann)	this study[a]	**AJ868351**	—

(*Continued*.)

(*Continued.*)

infraorder	family	species	reference	accession *ace-2*	accession *ace-1*
	Glossinidae	*Glossina fuscipes* Newstead	P. Grébaut, personal communication	AJ868353	—
	Nycteribiidae	*Penicillidia conspicua* Speiser	T. Disca, personal communication[a]	AJ868352	—
	Gasterophilidae	*Gasterophilus intestinalis* (De Geer)	A. Casteignau, personal communication	**AJ868355**	—

[a] Identification M. Martinez.
[b] Samples from Agroscope FAW, Wädenswill, Switzerland.
[c] Samples from FAO/IAEA Agriculture and Biotechnology Laboratory, Seibersdorf, Austria.
[d] Vontas *et al.* (2001).
[e] Samples from Université Cl. Bernard 1, Lyon, France.
[f] Samples from CS strain (Scott *et al.* 1996).
[g] Kozaki *et al.* (2001*b*).
[h] Accession of *Lucilia cuprina* (Chen *et al.* 2001).

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