**Supplemental Information for:**

**Hybridization during climate-induced range shifts**

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**Table S1. Summary of interactions between species of the same genus.** Data was grouped into seven categories based on the temporal order of reproduction barriers in odonates: 1) sexual interaction (both species interact without physical contact); 2) attempt to tandem (male attempts the tandem); 3) tandem occurrence (tandem is formed); 4) mating (mating takes place)*;* 5) oviposition (female lays eggs); 6) hybrid-field (hybrids from nature); 7) hybrid-lab (hybrids obtained in the laboratory).

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Genera*** | ***Species (male)*** | ***Species (female)*** | **Sexual interaction** | **Attempt to tandem** | **Tandem** | **Mating** | **Oviposition** | **Hybrid-field** | **Hybrid-lab** | **REFERENCE** |
| *Aehsna* | *affinis* | *cyanea* |  |  | **x** |  |  |  |  | Hacet, 2010 |
| *Aehsna* | *canadiensis* | *subartica* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Aehsna* | *subarctica* | *canadiensis* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Aehsna* | *confusa* | *diffinis* |  |  |  |  |  | x |  | Tennessen, 1982;  Corbet,1999 |
| *Aehsna* | *cyanea* | *juncea* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Aehsna* | *grandis* | *viridis* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Aehsna* | *interrupta* | *canadiensis* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Aehsna* | *juncea* | *mixta* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Aehsna* | *subarctica* | *juncea* | x | x | x |  |  |  |  | Bick & Bick, 1981;  Lunau, 1934;  Takita, 1981 |
| *Aehsna* | *subarctica* | *mixta* | x |  |  |  |  |  |  | Stark, 1971 |
| *Agrion* | *puella* | *pulchellum* |  |  |  |  |  | x |  | Asahina, 1976 |
| *Anax* | *imperator* | *parthenope* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Anax* | *junius* | *strenuus* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Anax* | *junius* | *walsinghami* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Anax* | *nigrofasciatus* | *Parthenope*  *julious* |  |  |  |  |  | x |  | Tennessen, 1982;  Corbet,1999 |
| *Anax* | *nigrofasciatus nigrofasciatus* | *Partenophe*  *julios* |  |  |  |  |  | x |  | Kita & Futahashi 2001 |
| *Anax* | *parthenope* | *nigrofasciatus* |  |  |  |  |  | x |  | Nishu, 1998 |
| *Argia* | *emma* | *vivida* |  | x |  |  |  |  |  | Paulson, 1974 |
| *Argia* | *plana* | *moesta* |  |  |  |  | x |  |  | Bick & Bick, 1981 |
| *Argia* | *tibialis* | *moesta* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Boyeria* | *grafiama* | *vinosa* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Calopteryx* | *aequabilis* | *maculata* |  |  |  |  | x |  |  | Bick & Bick, 1981 |
| *Calopteryx* | *dimidiata* | *maculata* |  |  |  | x |  |  |  | Oppenheimer & Robakiewicz, 1987 |
| *Calopteryx* | *haemorrhoidalis* | *splendens* |  |  |  | x |  |  |  | Wildermuth, 1984 |
| *Calopteryx* | *orientalis* | *samarcandica* |  |  |  |  |  | x |  | Dumont et al., 1997 |
| *Calopteryx* | *splendens* | *pulchellum* |  |  |  |  |  | x |  | Tinkkynen et al., 2008 |
| *Calopteryx* | *splendens* | *virgo* |  |  | x |  |  | x |  | Corbet,1999;  Svensson et al., 2007;  Tynkkynen et al., 2008 |
| *Calopteryx* | *virgo* | *splendens* |  |  |  |  |  |  |  | Lindeboom, 1996 |
| *Calopteryx* | *viridis* | *parvidens* |  |  |  |  |  | x |  | Olias & Seberdija, 1998 |
| *Cercion* | *sexlineatum* | *plagiosum* |  |  | x |  |  |  |  | Kita, 1997 |
| *Coenagrion* | *puella* | *pulchellum* | x |  |  |  |  | x |  | Corbet,1999;  Freeland & Conrad 2002,  Peters, 1988 |
| *Coenagrion* | *pulchellum* | *puella* |  |  |  |  |  | x |  | Miyazaki,1972 |
| *Cordulegaster* | *bilineata* | *diastatops* |  |  |  |  |  | x |  | Pilgrim et al., 2002 |
| *Dythemis* | *multipunctata* | *sterilis* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Dythemis* | *multipunctata kirby* | *sterilis* |  |  |  |  |  | x |  | De Marmels, 1989 |
| *Enallagma* | *anna* | *civile* |  |  |  |  |  | x |  | Donelly, 2000;  Catling, 2001 |
| *Enallagma* | *anna* | *carunculatum* |  |  |  |  |  | x |  | Johnson, 2009 |
| *Enallagma* | *aspersum* | *geminatum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *aspersum* | *civile* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *civile* | *aspersum* | x |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *boreale* | *carunculatum* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *carunculatum* | *boreale* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *boreale* | *cyathigerum* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *cyathigerum* | *boreale* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *carunculatum* | *civile* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Enallagma* | *civile* | *carunculatum* |  |  | x |  |  | x |  | Miyazaki,1972;  Bick & Bick, 1981 |
| *Enallagma* | *carunculatum* | *basidens* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *cyathigerum* | *praevare* |  | x |  |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *cyathigerum* | *vernale* |  |  |  |  |  | x |  | Donelly, 1998 |
| *Enallagma* | *cynosura* | *spinosa* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Enallagma* | *ebrium* | *hageni* |  |  |  |  |  | x |  | Catling, 2001 |
| *Enallagma* | *ebrium* | *boreale* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *pollutum* | *dubium* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *pollutum* | *signatum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *sygnatum* | *pollutum* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Enallagma* | *praevarum* | *cyathigerum* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Epitheca* | *spinigera* | *cynosura* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Gomphurus* | *externus* | *fraternus* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Gomphurus* | *graslinellus* | *lividus* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Gomphus* | *fraternus* | *externus* |  |  |  |  |  | x |  | Tennessen, 1982 |
| *Gomphus* | *graslinellus* | *sordidus* |  |  |  |  |  | x |  | Asahina, 1974 |
| *Gomphus* | *crassus* | *vastus* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Gomphus* | *exilis* | *spicatus* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Gomphus* | *moiwanus* | *chichibui* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Gomphus* | *simillimus* | *vulgatissimus* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Ischnura* | *barberi* | *ramburii* |  |  |  | x |  |  |  | Deviche, 2010 |
| *Ischnura* | *capreolus* | *cyane* |  |  |  |  |  |  |  | Galindo-Ruiz et al., 2020 |
| *Ischnura* | *damula* | *demorsa* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Ischnura* | *demorsa* | *damula* |  |  | x |  |  | x |  | Miller & Fincke, 2004 |
| *Ischnura* | *denticollis* | *gemina* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Ischnura* | *elegans* | *genei* |  |  |  |  |  |  |  | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *genei* | *elegans* |  |  |  |  |  |  | x | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *elegans* | *graellsii* |  |  |  |  |  | x |  | Miyazaki,1972 |
| *Ischnura* | *graellsii* | *elegans* |  |  |  |  |  |  |  | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *elegans* | *saharensis* |  |  |  |  |  |  | x | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *elegans ebneri* | *fountaineae* |  |  |  |  |  | x |  | Corbet,1999; Miyazaki 1972 |
| *Ischnura* | *genei* | *graellsii* |  |  |  |  |  |  | x | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *graellsii* | *genei* |  |  |  |  |  |  |  |  |
| *Ischnura* | *genei* | *saharensis* |  |  |  |  |  |  | x | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *graellsii* | *saharensis* |  |  |  |  |  |  | x | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *saharensis* | *graellsii* |  |  |  |  |  |  | x | Sánchez-Guillén et al., 2014 |
| *Ischnura* | *pumilio* | *elegans* |  | x |  |  |  |  |  | Miller & Fincke, 2004 |
| *Ischnura* | *pumilio* | *graellsii* |  |  |  | x |  |  |  | Cordero, 1989 |
| *Lestes* | *barbarus* | *viridis* |  |  | x |  | x |  |  | Utzeri & Belfiori, 1990;  Bick & Bick, 1981 |
| *Lestes* | *viridis* | *barbarus* | x |  |  |  |  |  |  | Utzeri et al., 1987 |
| *Lestes* | *barbarus* | *sponsa* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Lestes* | sponsa | *barbarus* |  |  | x |  |  |  |  | Torralba & Mezquita 2009; Torralba, 2004 |
| *Lestes* | *barbarus* | *dryas* |  |  | x |  |  |  |  | Mikat, 2006 |
| *Lestes* | *disjunctus* | *viridis* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Lestes* | *disjunctus* | *vigilax* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *dryas* | *sponsa* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *inaequalis* | *disjunctus*  *australis* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *parvidens* | *viridis* |  | x |  |  |  |  |  | Olias et al., 2007 |
| *Lestes* | *rectangularis* | *congener* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *rectangularis* | *unguiculatus* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *sponsa* | *viridis* |  |  | x |  | x |  |  | Bick & Bick, 1981;  Peters, 1988 |
| *Lestes* | *viridis* | *sponsa* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Lestes* | *sponsa* | *temporalis* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *sponsa* | *virens* |  |  | x |  |  |  |  | Mikat, 2006 |
| *Lestes* | *unguiculatus* | *dryas* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *virens* | *barbarus* | x |  |  |  |  |  |  | Utzeri et al., 1987 |
| *Lestes* | *virens* | *viridis* | x |  |  |  |  |  |  | Utzeri et al., 1987 |
| *Lestes* | *viridis* | *virens* |  |  | x |  |  |  |  | Miller & Fincke, 2004 |
| *Lestes* | *viridis* | *dryas* |  |  | x |  |  |  |  | Mikat, 2006 |
| *Leucorrhinia* | *glacialis* | *intacta* |  |  |  |  |  | x |  | Tennessen, 1982;  Corbet,1999 |
| *Leucorrhinia* | *dubia* | *rubicunda* |  | x | x |  |  |  |  | Pajunen, 1964;  Bick & Bick, 1981 |
| *Leucorrhinia* | *rubicunda* | *dubia* |  | x | x |  |  |  |  | Lunau, 1934;  Bick & Bick, 1981 |
| *Leucorrhinia* | *dubia orientalis* | *frequens* |  |  |  | x |  |  |  | Kita, 1997 |
| *Leucorrhinia* | *glacialis* | *intacta* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Leucorrhinia* | *hudsonica* | *proxima* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Libellula* | *pulchella* | *luctuosa* |  |  |  | x |  | x |  | Bick & Bick, 1981;  Tennessen, 1982 |
| *Libellula* | *angelina* | *quadrimaculata asahinai* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Libellula* | *quadrimaculata asahinai* | *angelina* |  |  |  | x |  | x |  | Fukui, 1987 |
| *Libellula* | *auripennis* | *cyanea* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Libellula* | *auripennis* | *semifasciata* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Libellula* | *flavida* | *cyanea* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Libellula* | *fulva* | *quadrimaculata* |  |  |  | x |  |  |  | Seggewise, 2008 |
| *Melagrion* | *eudytum* | *vagabundum* |  |  |  |  |  | x |  | Jordan, et al., 2003 |
| *Melagrion* | *mauka* | *paludicola* |  |  |  |  |  | x |  | Jordan, et al., 2003 |
| *Melagrion* | *nesiotes* | *oahuense* |  |  |  |  |  | x |  | Jordan, et al., 2003 |
| *Melagrion* | *orobates* | *oresitrophum* |  |  |  |  |  | x |  | Jordan, et al., 2003 |
| *Melagrion* | *Xanthomelas* | *pacificum* |  |  |  |  |  | x |  | Jordan, et al., 2003 |
| *Mnais* | *costalis* | *pruinosa* |  |  |  |  |  | x |  | Hayasi et al. 2004; 2005 |
| *Nehalennia* | *gracilis* | *irene* |  | x |  |  |  |  |  | Miller & Fincke, 2004 |
| *Nehalennia* | *irene* | *gracilis* | x | x |  |  |  |  |  | Hilton, 1983;  Van Gossum et al., 2007 |
| *Onychogommphus* | *forcipatus unguiculatus* | *uncatus* |  |  | x |  |  |  |  | Torralba & Mezquita 2009 |
| *Ophiogomphus* | *rupinsulensis* | *carolus* |  |  |  |  |  | x |  | Catling et al., 2005 |
| *Ophiogomphus* | *severus* | *occidentalis* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Orthetrum* | *albistylum speciosum* | *triangulare malania* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Orthetrum* | *albistylum speciosum* | *poecilops miyajiamaense* |  |  | x |  |  |  |  | Kita, 1997 |
| *Orthetrum* | *cancellatum* | *albistylum* |  | x |  |  |  |  |  | Visscher, 1989 |
| *Platycnemis* | *pennipes* | *acutipennis* |  |  |  |  | x |  |  | Miller & Fincke, 2004 |
| *Pseudagrion* | *rubriceps* | *microcephalum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Somatochlora* | *albicincta* | *hudsonica* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Somatochlora* | *sahlbergi* | *albicinta* |  |  |  |  |  | x |  | Cannings & Cannings, 1985 |
| *Somatochlora* | *sahlbergi* | *hudsonica* |  |  |  |  |  | x |  | Cannings & Cannings, 1985 |
| *Sympecma* | *fusca* | *paedisca* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *croceolum* | *unifiorme* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Sympetrum* | *danae* | *sanguineum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *darwinianum* | *maculatum* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Sympetrum* | *depressiusculum* | *fonscolombei* |  |  | *x* |  |  |  |  | Rehfeldt, 1993 |
| *Sympetrum* | *depressiusculum* | *frequens* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Sympetrum* | *eroticum eroticum* | *parvulum* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Sympetrum* | *eroticum eroticum* | *pedemontanum* |  |  |  |  |  | x |  | Corbet, 1999 |
| *Sympetrum* | *eroticum eroticum* | *darwinianum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *eroticum eroticum* | *baccha matutinum* |  |  |  | x | x |  | x | Ishikawa, 1982;1983 |
| *Sympetrum* | *frequens* | *infuscatum* |  |  | x | x |  |  |  | Eda, 1997;  Ubukata, 1984 |
| *Sympetrum* | *infuscatum* | *maculatum* |  |  |  | x |  |  |  | Kita, 2006 |
| *Sympetrum* | *internum* | *rubicundulum* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *kunckeli* | *darwinianum* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *meridionale* | *striolatum* |  | x |  |  |  |  |  | Utzeri & Belfiori, 1990 |
| *Sympetrum* | *obtrusum* | *danae* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *risi* | *infuscatum* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *risi risi* | *eroticum eroticum* | x |  |  |  |  |  |  | Arai, 1983 |
| *Sympetrum* | *rubicundulum* | *obtrusum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *sanguineum* | *meridionale* | x |  |  |  |  |  |  | Utzeri & Belfiori, 1990 |
| *Sympetrum* | *sanguineum* | *flaveolum* | x |  | x |  |  |  |  | Bick & Bick, 1981;  Peters, 1988 |
| *Sympetrum* | *sanguineum* | *vulgatum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *sanguineum* | *striolatum* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *striolatum* | *sanguineum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *striolatum* | *vulgatum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Sympetrum* | *vulgatum* | *striolatum* |  |  | x |  | x |  |  | Lunau, 1934;  Peters, 1988;  Bick & Bick, 1981 |
| *Sympetrum* | *vulgatum* | *danae* |  |  |  |  | x |  |  | Peters, 1988 |
| *Sympetrum* | *kunckeli* | *eroticum eroticum* |  |  |  |  |  |  | x | Futahashi & Araki, 2000 |
| *Trigomphus* | *interruptus* | *ogumai* |  |  | x |  |  |  |  | Bick & Bick, 1981 |

**Table S2. Summary of interspecific interactions between species of different genera.** Data was grouped into seven categories based on the temporal order of reproduction barriers in odonates: 1) sexual interaction (both species interact without physical contact); 2) attempt to tandem (male attempts the tandem); 3) tandem occurrence (tandem is formed); 4) mating (mating takes place)*;* 5) oviposition (female lays eggs); 6) hybrid-field (hybrids from nature); 7) hybrid-lab (hybrids obtained in the laboratory).

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| **Genus** | **Species (male)** | **Genus** | **Species (female)** | **Sexual inter** | **Try to tandem** | **Tandem** | **Mating** | **Oviposition** | **Hybrid-field** | **Hybrid-lab** | **REFERENCE** |
| *Anax* | *imperator* | *Aeshna* | *juncea* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Argia* | *emma* | *Enallagama* | *carunculatum* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Argia* | *sedula* | *Enallagama* | *basidensis* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Coenagrion* | *puella* | *Enallagama* | *cyathigerum* |  |  | x | x |  |  |  | Bick & Bick, 1981 |
| *Cordulia* | *aenea* | *Ephiteca* | *bimaculata* |  |  |  | x |  |  |  | Kosterin, 2000 |
| *Cordulia* | *aenea* | *Somatochlora* | *flavomaculata* | x |  |  | x |  |  |  | Valtonen, 1982 |
| *Cordulia* | *Shurtlefii* | *Leucorrinia* | *glaciallis* | x |  |  |  |  |  |  | Hilton, 1983 |
| *Crocothemis* | *erythraea* | *Trithemis* | *annulata* |  | x |  |  |  |  |  | Utzeri & Belfiori, 1990 |
| *Diplacodes* | *lefebvrei* | *Trithemis* | *arteriosa* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Dorocordulia* | *libera* | *Ephiteca* | *canis* | x |  |  |  |  |  |  | Miller &Fincke, 2004 |
| *Dromogomphus* | *spinosus* | *Gomphus* | *plagiatus* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *basidensis* | *Argia* | *apicalis* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *carunculatum* | *Argia* | *emma* | x |  |  |  |  |  |  | Miller &Fincke, 2004 |
| *Enallagma* | *carunculatum* | *Ischnura* | *cervula* | x |  |  |  |  |  |  | Miller &Fincke, 2004 |
| *Enallagma* | *carunculatum* | *Ischnura* | *perparva* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Enallagma* | *civile* | *Argia* | *moesta* |  |  | x | x |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *civile* | *Argia* | *vivida* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *cyathigerum* | *Coenagrion* | *puella* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Enallagma* | *cyathigerum* | *Ischnura* | *denticolis* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Enallagma* | *cyathigerum* | *Telebasis* | *salva* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Enallagma* | *hageni* | *Ischnura* | *cervula* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Gomphus* | *crassus* | *Ophiogomphus* | *rupisulensis* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Gomphus* | *plagiatus* | *Dromogomphus* | *armatus* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Hetaerina* | *americana* | *Calopteryx* | *maculata* |  | x | x | x |  |  |  | Weischsel, 1985 |
| *Ischnura* | *aurora* | *Xanthocnemis* | *Zealandica* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Ischnura* | *elegans* | *Coenagrion* | *pulchellum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Ischnura* | *elegans* | *Coenagrion* | *puella* |  |  |  | x |  |  |  | Utzeri & Belfiori, 1990; Miller & Fincke, 2004 |
| *Ischnura* | *elegans* | *Enallagama* | *cyathigerum* |  |  |  | x |  |  |  | Bick & Bick, 1981 |
| *Ischnura* | *elegans* | *Erythromma* | *lindenii* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Ischnura* | *elegans* | *Erythromma* | *najas* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Ischnura* | *elegans* | *Pyrrhosoma* | *nymphula* |  |  |  | x |  |  |  | Miller &Fincke, 2004 |
| *Ischnura* | *perparva* | *Enallagama* | *anna* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Ischnura* | *pumilio* | *Coenagrion* | *puella* |  |  |  | x |  |  |  | Miller &Fincke, 2004 |
| *Ischnura* | *pumilio* | *Enallagama* | *cyathigerum* |  |  |  | x |  |  |  | Miller &Fincke, 2004 |
| *Lestes* | *sponsa* | *Sympecma* | *paedisca* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *sponsa* | *Chalcolestes* | *viridis* |  |  | x |  |  |  |  | Torralba &Mezquita, 2009 |
| *Lestes* | *viridis* | *Sympecma* | *fusca* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Leucorrhinia* | *dubia orientalis* | *Sympetrum* | *danae* |  | x |  |  |  |  |  | Eda, 1980 |
| *Leucorrhinia* | *proxima* | *Sympetrum* | *pallipes* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Libellula* | *luctuosa* | *tramea* | *carolina* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Libellula* | *semifasciata* | *Celithemis* | *eponina* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Ophiogomphus* | *carolus* | *Gomphus* | *lividus* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Phyrrhosoma* | *nymphula* | *Coenagrion* | *lunulatum* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Phyrrhosoma* | *nymphula* | *Coenagrion* | *mercuriale* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Phyrrhosoma* | *nymphula* | *Coenagrion* | *puella* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Phyrrhosoma* | *nymphula* | *Ischnura* | *elegans* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Sympetrum* | *depressiusculum* | *Crocothemis* | *erythraea* |  |  | x |  |  |  |  | Miller, 1984 |
| *Sympetrum* | *depressiusculum* | *Orthetrum* | *cancellatum* | x |  |  |  |  |  |  | Miller, 1984 |
| *Sympetrum* | *frequens* | *Pantala* | *flavescens* |  |  | x |  |  |  |  | Kamigaki, 2001 |

**Table S3. Summary of interspecific interactions between species of different families.** Data was grouped into seven categories based on the temporal order of reproduction barriers in odonates: 1) sexual interaction (both species interact without physical contact); 2) attempt to tandem (male attempts the tandem); 3) tandem occurrence (tandem is formed); 4) mating (mating takes place)*;* 5) oviposition (female lays eggs); 6) hybrid-field (hybrids from nature); 7) hybrid-lab (hybrids obtained in the laboratory).

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Genus** | **Species (male)** | **Genus** | **Species (female)** | **Sexual inter** | **Try to tandem** | **Tandem** | **Mating** | **Oviposition** | **Hybrid-field** | **Hybrid-lab** | **REFERENCE** |
| *Aeshna* | *cyanea* | *Cordulegaster* | *boltonii* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Aeshna* | *cyanea* | *Sympetrum* | *striolatum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Anax* | *imperator* | *Cordulegaster* | *boltonii* |  |  |  | x |  |  |  | Bick & Bick, 1981; Fraser, 1936 |
| *Argia* | *tibialis* | *Lestes* | *dryas* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Brachytrom* | *pratense* | *Libellula* | *quadrimaculata* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Calopteryx* | *splendens* | *Platycnemis* | *pennipes* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Calopteryx* | *virgo* | *Pyrrhosoma* | *nynphula* |  |  |  |  |  |  |  | Seggewise, 2008 |
| *Coenagrion* | *ornatum* | *Platycnemis* | *pennipes* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Copera* | *marginipes* | *Ceriagrion* | *cerinorubellum* |  |  |  | x |  |  |  | Palot & Radhakrishnan 2004 |
| *Cordulegaster* | *boltonii* | *Somatochlora* | *metallica* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Deielia* | *phaon* | *Orthetrum* | *Albistylum* |  |  |  | x |  |  |  | Nakada, 2006 |
| *Elattoneura* | *glauca* | *allocnemis* | *leucosticta* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Enallagma* | *cyathigerum* | *Lestes* | *Dryas* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Enallagma* | *cyathigerum* | *Chalcolestes* | *viridis* |  |  | x |  |  |  |  | Feldwieser, 2002 |
| *Haeterina* | *americana* | *Lestes* | *Sp.* | x |  |  |  |  |  |  | Weichsel, 1985 |
| *Haeterina* | *americana* | *Cenagrionidae* | *Sp.* | x |  |  |  |  |  |  | Weichsel, 1985 |
| *Hetaerina* | *americana* | *Argia* | *plana* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Indolestes* | *peregrinus* | *cercion* | *hieroglyhicum* | x |  |  |  |  |  |  | Ishikawa, 1985 |
| *Ischnura* | *elegans* | *Calopteryx* | *splendens* |  |  |  | x |  |  |  | Seggewise, 2008 |
| *Ischnura* | *elegans* | *Lestes* | *viridis* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Ischnura* | *elegans* | *Lestes* | *sponsa* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Ischnura* | *elegans* | *Sympecma* | *fusca* |  |  |  | x |  |  |  | Seggewise, 2008 |
| *Ischnura* | *erratica* | *Lestes* | *disjunctus* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Lestes* | *australi* | *Enallagma* | *cyathigerum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Lestes* | *disjunctus* | *Enallagma* | *cyathigerum* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Lestes* | *sponsa* | *Ceriagrion* | *tenellum* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Lestes* | *sponsa* | *Erythorma* | *najas* |  |  | x |  |  |  |  | Miller &Fincke, 2004; Mikat, 2006 |
| *Lestes* | *sponsa* | *Enallagma* | *cyathigerum* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Lestes* | *viridis* | *Erythromma* | *viridulum* |  |  | x |  |  |  |  | Bick & Bick, 1981 |
| *Leucorrihinia* | *dubia orientalis* | *Sympetrum* | *danae* |  |  | x |  |  |  |  | Eda, 1980 |
| *Orthetrum* | *brunneum* | *Onychogomphus* | *forcipatus* |  | x |  |  |  |  |  | Utzeri & Belfiori, 1990 |
| *Platycnemis* | *pennipes* | *Coenagrion* | *puella* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Pyrrhosoma* | *nymphula* | *Lestes* | *barbarus* |  | x |  |  |  |  |  | Miller &Fincke, 2004 |
| *Pyrrhosoma* | *nymphula* | *Sympecma* | *fusca* |  |  | x |  |  |  |  | Miller &Fincke, 2004 |
| *Pyrrhosoma* | *nymphula* | *Ischnura* | *pumilio* |  |  | x |  |  |  |  | Garner, 2003 |
| *Sympetrum* | *depressiusculum* | *Crocothemis* | *erythraea* |  |  | x |  |  |  |  | Rehfeldt, 1993 |
| *Sympetrum* | *depressiusculum* | *Orthetrum* | *cancellatum* |  |  | x |  |  |  |  | Rehfeldt, 1993 |
| *Sympetrum* | *depressiusculum* | *Orthetrum* | *Albistylum* |  |  | x |  |  |  |  | Rehfeldt, 1993 |
| *Sympetrum* | *depressiusculum* | *Libellula* | *fulva* |  |  | x |  |  |  |  | Rehfeldt, 1993 |
| *Sympetrum* | *depressiusculum* | *Onychogomphus* | *uncatus* |  |  | x |  |  |  |  | Rehfeldt, 1993 |
| *Sympetrum* | *depressiusculum* | *Oxygastra* | *curtisii* |  |  | x |  |  |  |  | Rehfeldt, 1993 |
| *Sympetrum* | *sanguineum* | *Crocothemis* | *erythraea* |  |  | x |  |  |  |  | Cuvelier, 2003 |

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