

Tabelle 2: Die komplette Artenliste der Challenge „Aliens unter uns“ auf Observation.org

Table 2: The complete species list of the Alien Animal Species challenge at Observation.org.

<b>Acari<sup>i</sup></b>	<i>Hydroides elegans</i>	<i>Takecallis arundicolens</i>
<i>Aceria kuko</i>	<i>Hypania invalida</i>	<i>Takecallis arundinariae</i>
<i>Aceria pyracanthi</i>	<i>Hypereteone heteropoda</i>	<i>Takecallis sasae</i>
<i>Hyalomma marginatum</i>	<i>Hypereteone lighti</i>	<i>Takecallis taiwana</i>
<i>Mucotergum nigrum</i>	<i>Laonome xeprovala</i>	<i>Therioaphis tenera</i>
<i>Petrobia hartii</i>	<i>Lipobranchus jeffreysii</i>	<i>Tinocallis takachihouensis</i>
<i>Rhipicephalus sanguineus</i>	<i>Loimia ramzega</i>	<i>Uroleucon daronici</i>
<b>Aleyrodoidea<sup>ii</sup></b>	<i>Marenzelleria neglecta</i>	<i>Uroleucon erigeronense</i>
<i>Aleurotuba jelinekii</i>	<i>Marenzelleria viridis</i>	<i>Uroleucon solidaginis</i>
<i>Bemisia tabaci</i>	<i>Microphthalmus similis</i>	<i>Uroleucon telekiaie</i>
<i>Massilieuroides chittendeni</i>	<i>Neodexiospira brasiliensis</i>	<i>Wahlgreniella nervata</i>
<i>(Dialeurodes chittendeni)</i>	<i>Pileolaria berkeleyana</i>	
<i>Parabemisia myricae</i>	<i>Pileolaria militaris</i>	<b>„Apterygota“<sup>vi</sup></b>
<i>Paraleyroides minei</i>	<i>Polydora websteri</i>	<i>Allacma gallica</i>
<i>Pealius azaleae</i>	<i>Potamothrix bavaricus</i>	<i>Campylothorax schaefferi</i>
<i>Siphoninus phillyreae</i>	<i>Potamothrix hammoniensis</i>	<i>Coletinia maggii</i>
<i>Trialeurodes vaporariorum</i>	<i>Potamothrix moldaviensis</i>	<i>Cryptopygus pentatomus</i>
<b>„Amphibia“<sup>iii</sup></b>	<i>Streblospio benedicti</i>	<i>Ctenolepisma calva</i>
<i>Lithobates catesbeianus</i>	<i>Tharyx killariensis</i>	<i>Ctenolepisma lineata</i>
<i>Ommatotriton ophryticus</i>	<i>Tomopteris helgolandica</i>	<i>Ctenolepisma longicaudata</i>
<i>Pelophyax bergeri</i>	<i>Tubificoides heterochaetus</i>	<i>(Ctenolepisma longicaudatum)</i>
<i>Pelophylax bedriagae</i>	<b>Aphidoidea<sup>v</sup></b>	<i>Cyphoderus assimilis</i>
<i>Pelophylax kurtmuelleri</i>	<i>Aphanostigma piri</i>	<i>Desoria trispinata</i>
<i>Speleomantes italicus</i>	<i>Aphis gerardianae</i>	<i>Dicranocentrus silvestrii</i>
<i>Triturus carnifex</i>	<i>Aphis oenotherae</i>	<i>Entomobrya spectabilis</i>
<b>Annelida<sup>iv</sup></b>	<i>Aphis spiraeicola</i>	<i>Lepidocyrtus pallidus</i>
<i>Alitta virens</i>	<i>Appendiseta robiniae</i>	<i>Lepisma saccharinum</i>
<i>Alitta succinea</i>	<i>Brachycaudus jacobi</i>	<i>Nicoletia phytophila</i>
<i>Alkmaria romijni</i>	<i>Cavariella konoii</i>	<i>Orthonychiurus folsomi</i>
<i>Aphelochaeta marioni</i>	<i>Crypturaphis grassii</i>	<i>Seira mexicana</i>
<i>Barbronia weberi</i>	<i>Diuraphis noxia</i>	<i>Sminthurides bifidus</i>
<i>Boccardia proboscidea</i>	<i>Dysaphis gallica</i>	<i>Sminthurinus trinotatus</i>
<i>Boccardiella ligerica</i>	<i>Dysaphis tulipae</i>	<i>Sphyrotheca multifasciata</i>
<i>Branchiura sowerbyi</i>	<i>Illinoia azaleae</i>	<i>Thermobia aegyptiaca</i>
<i>Caspiobdella fadejewi</i>	<i>Impatiensium asiaticum</i>	<i>Thermobia domestica</i>
<i>Enchytraeus capitatus</i>	<i>Macrosiphum albifrons</i>	
<i>Ficopomatus enigmaticus</i>	<i>Myzus varians</i>	<b>Araneae<sup>vii</sup></b>
<i>Helobdella europaea</i>	<i>Neotoxoptera formosana</i>	<i>Cheiracanthium mildei</i>
<i>Hirudo verbana</i>	<i>Schizaphis graminum</i>	<i>Cicurina japonica</i>
		<i>Coleosoma floridanum</i>

*Cryptachaea blattea*  
*Eusparassus walckenaeri*  
*Hasarius adansoni*  
*Heteroonops spinimanus*  
*Heteropoda venatoria*  
*Holocnemus pluchei*  
*Howaia mogera*  
*Icius hamatus*  
*Icius subinermis*  
*Ischnothyreus velox*  
*Kryptonesticus eremita*  
(*Nesticus eremita*)  
*Macaroseris nidicolens*  
*Macrothele calpeiana*  
*Mermessus denticulatus*  
*Mermessus trilobatus*  
*Nesticella mogera*  
*Nesticodes rufipes*  
*Oecobius navus*  
*Olios argelasius*  
*Oonops domesticus*  
*Oonops pulcher*  
*Ostearius melanopygius*  
*Pandava laminata*  
*Parasteatoda tabulata*  
*Parasteatoda tepidariorum*  
*Paratrachela maculatus*  
*Pseudanapis aloha*  
*Pseudeuophrys lanigera*  
*Psilochorus simoni*  
*Quamtana spec.*  
*Saitis barbipes*  
*Scytodes fusca*  
*Silhouettella loricatula*  
*Spermophora kerinci*  
*Steatoda grossa*  
*Steatoda triangulosa*  
*Textrix caudata*  
*Thanatus vulgaris*  
*Theotima minutissima*  
*Triaeris stenaspis*  
*Uloborus plumipes*  
*Urozelotes rusticus*  
*Zimiris doriai*  
*Zoropsis spinimana*  
**Asciidae**<sup>viii</sup>  
*Aplidium glabrum*

*Aplidium nordmanni*  
*Botrylloides diegensis*  
*Botrylloides violaceus*  
*Botryllus schlosseri*  
*Corella eumyota*  
*Didemnum vexillum*  
*Diplosoma listerianum*  
*Molgula manhattensis*  
*Perophora japonica*  
*Styela clava*  
**Auchenorrhyncha**<sup>ix</sup>  
*Acanalonia conica*  
*Cicada orni*  
*Erasmoneura vulnerata*  
*Graphocephala fennahi*  
*Graptosaltria nigrofuscata*  
*Hishimonus hamatus*  
*Igutettix oculatus*  
*Japananus hyalinus*  
*Jikradia olitoria*  
*Liguropia juniperi*  
*Metcalfa pruinosa*  
*Orientus ishidae*  
*Osbornellus auronitens*  
*Penestrangia apicalis*  
*Phlogotettix cyclops*  
*Placotettix taeniatifrons*  
*Platypleura kaempferi*  
*Scaphoideus titanus*  
*Stictocephala bisonia*  
*Synophropsis lauri*  
**Aves**<sup>x</sup>  
*Acridotheres cristatellus*  
*Acridotheres tristis*  
*Aix galericulata*  
*Aix sponsa*  
*Alopochen aegyptiaca*  
*Amazona oratrix*  
*Anser caerulescens*  
*Anser cygnoides f. domestica*  
*Anser indicus*  
*Branta canadensis*  
*Branta hutchinsii minima*  
*Branta leucopsis*  
*Callonetta leucophrys*  
*Chrysolophus amherstiae*

*Chrysolophus pictus*  
*Columba livia var. domestica*  
*Corvus splendens*  
*Cygnus atratus*  
*Cygnus cygnus*  
*Meleagris gallopavo*  
*Myiopsitta monachus*  
*Oxyura jamaicensis*  
*Phasianus colchicus*  
*Phoenicopterus chilensis*  
*Phoenicopterus roseus*  
*Phoenicopterus ruber*  
*Psittacula eupatria*  
*Psittacula krameri*  
*Rhea americana*  
*Streptopelia decaocto*  
*Syrnaticus reevesii*  
*Tadorna ferruginea*  
*Threskiornis aethiopicus*  
**„Blattodea“**<sup>xi</sup>  
*Blaberus craniifer*  
*Blaptica dubia*  
*Blatta orientalis*  
*Blattella germanica*  
*Cariblatta lutea*  
*Cariblatta spec.*  
*Ectobius vittiventris*  
*Gromphadorhina portentosa*  
*Loboptera decipiens*  
*Neostylopyga rhombifolia*  
*Panchlora viridis*  
*Periplaneta americana*  
*Periplaneta australasiae*  
*Periplaneta brunnea*  
*Periplaneta fuliginosa*  
*Planuncus tingitanus*  
*Planuncus tingitanus s.l.*  
*Pycnoscelus surinamensis*  
*Rhyarobia maderae*  
*Supella longipalpa*  
**Cnidaria/Ctenophora**<sup>xii</sup>  
*Blackfordia virginica*  
*Bougainvillia macloviana*  
*Cereus pedunculatus*  
*Cordylophora caspia*  
*Craspedacusta sowerbii*

<i>Diadumene cincta</i>	<i>Acrotrichis volans</i>	<i>Cryptolestes capensis</i>
<i>Diadumene lineata</i>	<i>Adistemia watsoni</i>	<i>Cryptolestes pusilloides</i>
<i>Garveia franciscana</i>	<i>Agrilus planipennis</i>	<i>Cryptolestes pusillus</i>
<i>Gonionemus vertens</i>	<i>Alocentron curvirostre</i>	<i>Cryptophagus obsoletus</i>
<i>Haliclystus tenuis</i>	<i>Anoplophora chinensis</i>	<i>Cryptophilus integer</i>
<i>Mnemiopsis leidy</i>	<i>Anoplophora glabripennis</i>	<i>Cryptophilus obliteratus</i>
<i>Moerisia inkermanica</i>	<i>Anthonomus eugenii</i>	<i>Cryptopleurum subtile</i>
<i>Nemopsis bachei</i>	<i>Anthrenocerus australis</i>	<i>Curculio vicetinus</i>
<i>Pachycordyle michaeli</i>	<i>Anthrenus flavipes</i>	<i>Curelius japonicus</i>
<b>Coccoidea<sup>xiii</sup></b>	<i>Aromia bungii</i>	<i>Cyclorhipidion bodoanum</i>
<i>Acanthococcus transversus</i>	<i>Atheta pseudoelongatula</i>	<i>Cynaues angustus</i>
<i>Aspidiotus hedericola</i>	<i>Attagenus fasciatus</i>	<i>Dactylosternum abdominale</i>
<i>Aspidiotus nerii</i>	<i>Attagenus smirnovi</i>	<i>Diabrotica virgifera</i>
<i>Atrococcus paludinus</i>	<i>Baeocrara japonica</i>	<i>Dryocoetes himalayensis</i>
<i>Carulaspis juniperi</i>	<i>Bambara contorta</i>	<i>Ephistemus reitteri</i>
<i>Chionaspis pinifoliae</i>	<i>Bambara fusca</i>	<i>Epiphanius cornutus</i>
<i>Coccus hesperidum</i>	<i>Berginus tamarisci</i>	<i>Eपुरaea ocularis</i>
<i>Comstockaspis perniciososa</i>	<i>Bohemiellina flavipennis</i>	<i>Euconnus campestris</i>
<i>(Diaspidiotus perniciosus)</i>	<i>Bostrychoplites cornutus</i>	<i>Euophryum confine</i>
<i>Diaspidiotus pyri</i>	<i>Brachyderes lusitanicus</i>	<i>Ferreria marqueti</i>
<i>Epidiaspis leperii</i>	<i>Bruchidius siliquastri</i>	<i>Glichrochilus quadrisignatus</i>
<i>Eriococcus transversus</i>	<i>Bruchus emarginatus</i>	<i>Gnathotrichus materiarius</i>
<i>Icerya purchasi</i>	<i>Bruchus ervi</i>	<i>Harmonia axyridis</i>
<i>Kermes gibbosus</i>	<i>Bruchus lentis</i>	<i>Harmonia axyridis f. aulica</i>
<i>Kuwanaspis pseudoleucaspis</i>	<i>Callosobruchus chinensis</i>	<i>Harmonia axyridis f. axyridis</i>
<i>Leucaspis pusilla</i>	<i>Callosobruchus maculatus</i>	<i>Harmonia axyridis f. conspicua</i>
<i>Parthenolecanium fletcheri</i>	<i>Carpelimus gusarovi</i>	<i>Harmonia axyridis f. equicolor</i>
<i>Parthenolecanium persicae</i>	<i>Carpelimus zealandicus</i>	<i>Harmonia axyridis f. intermedia</i>
<i>Phenacoccus solani</i>	<i>Carpophilus bipustulatus</i>	<i>Harmonia axyridis f. spectabilis</i>
<i>Planchonia arabis</i>	<i>Carpophilus dimidiatus</i>	<i>Harmonia axyridis f. succinea</i>
<i>Pseudaulacaspis pentagona</i>	<i>Carpophilus ligneus</i>	<i>Hexarthrum capitulum</i>
<i>Pseudococcus viburni</i>	<i>Carpophilus mutilatus</i>	<i>Lasioderma serricornis</i>
<i>Pulvinaria floccifera</i>	<i>Carpophilus nepos</i>	<i>Leiopus femoratus</i>
<i>Pulvinaria kuwacola</i>	<i>Carpophilus obsoletus</i>	<i>Leptinotarsa decemlineata</i>
<i>Pulvinaria regalis</i>	<i>Carpophilus quadrisignatus</i>	<i>Litargus balteatus</i>
<i>Rhizaspidotus canariensis</i>	<i>Carpophilus truncatus</i>	<i>Luperomorpha xanthodera</i>
<i>Trionymus bambusae</i>	<i>Cartodere bifasciata</i>	<i>Lyctus brunneus</i>
<i>Unaspis euonymi</i>	<i>Cartodere nodifer</i>	<i>Lyctus cavicollis</i>
<b>Coleoptera<sup>xiv</sup></b>	<i>Cartodere norvegica</i>	<i>Lyctus planicollis</i>
<i>Acalolepta sejuncta</i>	<i>Cercyon laminatus</i>	<i>Metopthalmus serripennis</i>
<i>Acanthoscelides obtectus</i>	<i>Chlorophorus annularis</i>	<i>Migneauxia lederi</i>
<i>Acanthoscelides pallidipennis</i>	<i>Chrysolina americana</i>	<i>Mimela junii</i>
<i>Acritus komai</i>	<i>Cilea exilis</i>	<i>Mimosestes mimosae</i>
<i>Acrotona pseudotenera</i>	<i>Clambus simsoni</i>	
<i>Acrotichis cognata</i>	<i>Coenonica puncticollis</i>	
<i>Acrotichis henrici</i>	<i>Conotrachelus nenuphar</i>	
	<i>Coproporus immigrans</i>	

<i>Neoclytus acuminatus</i>	<i>Urophorus humeralis</i>	<i>Hemigrapsus sanguineus</i>
<i>Oryzaephilus mercator</i>	<i>Xyleborinus attenuatus</i>	<i>Hemigrapsus takanoi</i>
<i>Oryzaephilus surinamensis</i>	<i>Xyleborus alni</i>	<i>Hemimysis anomala</i>
<i>Otiorhynchus aurifer</i>	<i>Xyleborus pfeilli</i>	<i>Homarus americanus</i>
<i>Otiorhynchus corruptor</i>	<i>Xylosandrus germanus</i>	<i>Idotea metallica</i>
<i>Otiorhynchus crataegi</i>	<i>(Xyleborus germanus)</i>	<i>Incisocalliope aestuarius</i>
<i>Otiorhynchus indefinitus</i>		<i>Jaera istri</i>
<i>Otiorhynchus meridionalis</i>	<b>„Crustacea“<sup>xv</sup></b>	<i>Jaera sarsi</i>
<i>Otiorhynchus pseudonothus</i>	<i>Acartia tonsa</i>	<i>Jassa marmorata</i>
<i>Otiorhynchus smreczynskii</i>	<i>Ameira divagans</i>	<i>Katamysis warpachowskyi</i>
<i>Oxytelus migrator</i>	<i>Amphibalanus improvisus</i>	<i>Limnomysis benedeni</i>
<i>Pachyrhinus lethierryi</i>	<i>Aoroides semicurvatus</i>	<i>Melita nitida</i>
<i>Parabathyscia wollastoni</i>	<i>Argulus japonicus</i>	<i>Monocorophium sextonae</i>
<i>Parandra brunnea</i>	<i>Armadillidium nasatum</i>	<i>Monocorophium uenoi</i>
<i>Paraphloeostiba</i>	<i>Atyaephyra desmarestii</i>	<i>Mytilicola intestinalis</i>
<i>  gaydahensis</i>	<i>Austrominius modestus</i>	<i>Mytilicola orientalis</i>
<i>Pentarthrum huttoni</i>	<i>Balanus improvisus</i>	<i>Nippoleucon hinumensis</i>
<i>Phacophallus pallidipennis</i>	<i>Britorchestia brito</i>	<i>Obesogammarus crassus</i>
<i>Philonthus rectangulus</i>	<i>Callinectes sapidus</i>	<i>Obesogammarus obesus</i>
<i>Philonthus spinipes</i>	<i>Caprella mutica</i>	<i>Oithona davisae</i>
<i>Phloeosinus aubei</i>	<i>Cercopagis pengoi</i>	<i>Orchestia mediterranea</i>
<i>Phloeotribus caucasicus</i>	<i>Chaetogammarus ischnus</i>	<i>Pacifastacus leniusculus</i>
<i>Phyllobius intrusus</i>	<i>(Echinogammarus ischnus)</i>	<i>Pagurus longicarpus</i>
<i>Pityophthorus juglandis</i>	<i>Chaetogammarus trichiatus</i>	<i>Palaemon elegans</i>
<i>Polydrusus inustus</i>	<i>(Echinogammarus trichiatus)</i>	<i>Palaemon macrodactylus</i>
<i>Popillia japonica</i>	<i>Chelicorophium curvispinum</i>	<i>Paramysis lacustris</i>
<i>Pseudolathra manueli</i>	<i>Chelicorophium robustum</i>	<i>Platorchestia platensis</i>
<i>Pseudopachymerina spinipes</i>	<i>Chelicorophium sowinskyi</i>	<i>Pontastacus leptodactylus</i>
<i>Reesa vespulae</i>	<i>Crangonyx pseudogracilis</i>	<i>Pontogammarus robustoides</i>
<i>Rhizophagus oblongicollis</i>	<i>Cryptorchestia cavimana</i>	<i>Porcellio dilatatus</i>
<i>Rhomphocallus bernhaueri</i>	<i>Cryptorchestia garbinii</i>	<i>Porcellio laevis</i>
<i>Rhopalopion longirostre</i>	<i>Dikerogammarus</i>	<i>Porcellionides pruinosus</i>
<i>Saperda candida</i>	<i>  haemobaphes</i>	<i>Proasellus coxalis</i>
<i>Sitophilus granarius</i>	<i>Dikerogammarus villosus</i>	<i>Proasellus meridianus</i>
<i>Sitophilus linearis</i>	<i>Echinogammarus berilloni</i>	<i>Procambarus acutus/</i>
<i>Sitophilus oryzae</i>	<i>Elminius modestus</i>	<i>  zonangulus</i>
<i>Sitophilus zeamais</i>	<i>Eriocheir sinensis</i>	<i>Procambarus alleni</i>
<i>Stegobium paniceum</i>	<i>Faxonius immunis</i>	<i>Procambarus clarkii</i>
<i>Stelidota geminata</i>	<i>(Orconectes immunis)</i>	<i>Procambarus virginialis</i>
<i>Stenopelmus rufinasus</i>	<i>Faxonius juvenilis</i>	<i>Pseudodiaptomus marinus</i>
<i>Stomodes gyrosicollis</i>	<i>(Orconectes juvenilis)</i>	<i>Rhithropanopeus harrisi</i>
<i>Thylotrias contractus</i>	<i>Faxonius limosus (Orconectes</i>	<i>Sinelobus vanhaareni</i>
<i>Trichoferus campestris</i>	<i>  limosus)</i>	<i>Synidotea laticauda</i>
<i>Trixagus atticus</i>	<i>Faxonius virilise (Orconectes</i>	<i>Trichoniscoides sarsi</i>
<i>Trixagus gracilis</i>	<i>  virilis)</i>	
<i>Trogoderma angustum</i>	<i>Gammarus tigrinus</i>	<b>Dermaptera<sup>xvi</sup></b>
<i>Typhaea decipiens</i>	<i>Gammarus varsoviensis</i>	<i>Euborellia annulipes</i>
	<i>Grandidierella japonica</i>	<i>Euborellia arcanum</i>

*Forficula smyrnensis*  
*Marava arachidis*  
*Paralabella curvicauda*

**Diptera<sup>xvii</sup>**

*Aedes aegyptii*  
*Aedes albopictus*  
*Aedes atropalpus*  
*Aedes japonicus*  
*Aedes koreicus*  
*Anopheles daciae*  
*Anopheles petragrani*  
*Calopistromyia annulipes*  
*Ceratitis capitata*  
*Chrysoma albiceps*  
*Chymomyza amoena*  
*Clogmia albipunctata*  
*Contarinia quinquenotata*  
*Culiseta longiareolata*  
*Cupressatia siskiyou*  
*Dasineura gleditchiae*  
*Desmometopa microps*  
*Drosophila suzukii*  
*Euxesta notata*  
*Gymnodia polystigma*  
*Hermetia illucens*  
*Hydrotaea aenescens*  
*Lipoptena fortisetosa*  
*Liriomyza huidobrensis*  
*Obolodiplosis robiniae*  
*Pelomyia occidentalis*  
*Penthetria heteroptera*  
*Phlebotomus mascittii*  
*Prosopandrum flavifrons*  
*Rhagoletis batava*  
*Psychoda alternata*  
*Rhagoletis cingulata*  
*Rhagoletis completa*  
*Rhagoletis zoqui*  
*Stomorhina lunata*  
*Strauzia longipennis*  
*Telmatogeton japonicus*  
*Tephritid praecox*  
*Trichopoda pictipennis*  
*Triplasius pictus*  
*Vermileo vermileo*

**Embioptera<sup>xviii</sup>**

*Cleomia guareschi*  
*Embia amadorae*  
*Embia cynthiae*  
*Embia fuentei*  
*Embia girolamii*  
*Embia nuragica*  
*Embia ramburi*  
*Embia savignyi*  
*Embia tyrrhenica*  
*Haploembia palaui*  
*Haploembia solieri*  
*Oligotoma nigra*  
*Oligotoma saundersii*

**Ephemeroptera/  
Plecoptera/Trichoptera<sup>xix</sup>**

*Hydroptila lotensis*  
*Leptocerus lusitanicus*  
*Limnephilus italicus*  
*Taeniopteryx schoenemundi*

**Heteroptera<sup>xx</sup>**

*Acetropis longirostris*  
*Amphiareus obscuriceps*  
*Aradus mirus*  
*Aradus ribauti*  
*Arocatus longiceps*  
*Belonochilus numenius*  
*Blepharidopterus chlorionis*  
*Brachyplax tenuis*  
*Buchananiella continua*  
*Camptopus lateralis*  
*Chroantha ornatula*  
*Closterotomus trivialis*  
*Conostethus venustus*  
*Corythucha arcuata*  
*Corythucha ciliata*  
*Deraeocoris flavilinea*  
*Dichroscytus gustavi*  
*Dictyla nassata*  
*Dicyphus bolivari*  
*Dicyphus escalerae*  
*Dyroderes umbraculatus*  
*Elasmotropis testacea*  
*Empicoris rubromaculatus*  
*Erthesina fullo*  
*Eurydema ventralis*  
*Halyomorpha halys*

*Heterotoma merioptera*  
*Holcogaster fibulata*  
*Isometopus mirificus*  
*Lamprodema maura*  
*Leptoglossus occidentalis*  
*Mecidea lindbergi*  
*Megalocoleus naso*  
*Megalonotus puncticollis*  
*Microplax albofasciata*  
*Microplax interrupta*  
*Nagusta goedelii*  
*Naochila parvella*  
*Nezara viridula*  
*Nysius graminicola*  
*Nysius huttoni*  
*Ochetostethus nanus*  
*Odontoplatus suturalis*  
*Orsillus depressus*  
*Orthotylus caprai*  
*Oxycarenus lavaterae*  
*Oxycarenus pallens*  
*Perillus bioculatus*  
*Phytocoris parvulus*  
*Plagiognathus delicatus*  
*Psallus aethiops*  
*Psallus helenae*  
*Spilostethus pandurus*  
*Stephanitis oberti*  
*Stephanitis pyrioides*  
*Stephanitis rhododendri*  
*Stephanitis takeyai*  
*Tropidostepes pacificus*  
*Tupiocoris rhododendri*  
*Tuonia brevirostris*  
*Tuonia elegans*  
*Tuonia mixticolor*  
*Xylocoridea brevipennis*  
*Zelus renardii*

**Hymenoptera<sup>xxi</sup>**

*Anagyrus novickyi*  
*Anagyrus securicornis*  
*Aproceros leucopoda*  
*Crematogaster scutellaris*  
*Dryocosmus kuriphilus*  
*Encarsia citrina*  
*Euura tibialis*  
*Hypoponera eduardi*

*Hypoponera punctatissima*  
*Hypoponera schauinslandi*  
*Isodontia mexicana*  
*Lasius neglectus*  
*Linepithema humile*  
*Megachile sculpturalis*  
*Monomorium pharaonis*  
*Monostegia nigra*  
*Nematus tibialis*  
*Neodryinus typhlocybae*  
*Pheidole pallidula*  
*Polynema striaticorne*  
*Rhadinoceraea reitteri*  
*Rophites hartmanni*  
*Sceliphron caementarium*  
*Sceliphron curvatum*  
*Solenopsis geminata*  
*Solenopsis invicta*  
*Solenopsis richteri*  
*Tapinoma darioi*  
*Tapinoma magnum*  
*Tapinoma nigerrimum*  
*Trioxyx remaudierei*  
*Trissolcus basalis*  
*Trissolcus japonicus*  
*Vespa mandarina*  
*Vespa mandarina japonica*  
*Vespa orientalis*  
*Vespa soror*  
*Vespa velutina*  
*Vespa velutina nigrithorax*  
*Wasmannia auropunctata*  
*Xyela curva*  
*Xyela menelaus*

**Isoptera<sup>xxii</sup>**  
*Amitermes amicki*  
*Anacanthotermes ubachi*  
*Coptotermes acinaciformis*  
*Coptotermes curvignathus*  
*Coptotermes formosanus*  
*Coptotermes frenchi*  
*Coptotermes gestroi*  
*Coptotermes sjostedti*  
*Cryptotermes brevis*  
*Cryptotermes canalensis*  
*Cryptotermes cylindroceps*  
*Cryptotermes cynocephalus*

*Cryptotermes domesticus*  
*Cryptotermes dudleyi*  
*Cryptotermes havilandi*  
*Glyptotermes brevicornis*  
*Heterotermes cardini*  
*Heterotermes convexinotatus*  
*Heterotermes perfidus*  
*Heterotermes philippinensis*  
*Heterotermes tenuis*  
*Hodotermes mossambicus*  
*Hospitalitermes ataramensis*  
*Hospitalitermes jepsoni*  
*Incisitermes immigrans*  
*Incisitermes minor*  
*Incisitermes semilunaris*  
*Kaloterms banksiae*  
*Kaloterms dispar*  
*Kaloterms flavicollis*  
*Kaloterms italicus*  
*Macrotermes carbonarius*  
*Macrotermes gilvus*  
*Macrotermes natalensis*  
*Mastotermes darwiniensis*  
*Microcerotermes novaecaledoniae*  
*Nasutitermes corniger*  
*Nasutitermes exitiosus*  
*Nasutitermes nigriceps*  
*Neotermes rouxi*  
*Odontotermes badius*  
*Porotermes adamsoni*  
*Procryptotermes rapae*  
*Reticulitermes balkanensis*  
*Reticulitermes banyulensis*  
*Reticulitermes flavipes*  
*Reticulitermes grassei*  
*Reticulitermes lucifugus*  
*Reticulitermes santonensis*  
*Rugitermes athertoni*  
*Termes hispaniolae*  
*Termes pulsatorium*  
*Zootermopsis angusticollis*  
*Zootermopsis nevadensis*

**Lepidoptera<sup>xxiii</sup>**  
*Anarsia lineatella*  
*Antheraea yamamai*  
*Aphomia cephalonica*

*Aphomia gularis*  
*Apomyelois ceratoniae*  
*Argyresthia thuiella*  
*Argyresthia trifasciata*  
*Cabera leptographa*  
*Cacoecimorpha pronubana*  
*Cacyreus marshalli*  
*Cadra calidella*  
*Cadra cautella*  
*Cadra figulilella*  
*Caloptilia azaleella*  
*Cameraria ohridella*  
*Chiasmia aestimaria*  
*Chrysodeixis chalcites*  
*Clepsis peritana*  
*Cnephasia longana*  
*Cnephasia pumicana*  
*Coleophora laricella*  
*Coleotechnites piceaella*  
*Coptodisca splendoriferella*  
*Corcyra cephalonica*  
*Cydalima perspectalis*  
*Diploperistis perieresalis*  
*Duponchelia fovealis*  
*Eilema caniola*  
*Ephestia elutella*  
*Ephestia kuehniella*  
*Eratophyes amasiella*  
*Etiella zinckenella*  
*Euchromius ocella*  
*Eupithecia carpophagata*  
*Evergestis aenealis*  
*Godonela aestimaria*  
*Grapholita molesta*  
*Helicoverpa armigera*  
*Hyphantria cunea*  
*Oedilepia polygraphella*  
*Oegoconia novimundi*  
*Opogona sacchari*  
*Palpita vitrealis*  
*Papilio demodocus*  
*Paralipsa gularis*  
*Parapoynx diminutalis*  
*Parectopa robiniella*  
*Paysandisia archon*  
*Peribatodes perversaria*  
*Phthorimaea operculella*

*Phyllocnistis vitegenella*  
*Phyllonorycter issikii*  
*Phyllonorycter leucographella*  
*Phyllonorycter platani*  
*Pieris mannii*  
*Plodia interpunctella*  
*Scopula imitaria*  
*Scythris buszkoi*  
*Sitotroga cerealella*  
*Spoladea recurvalis*  
*Thaumatotibia leucotreta*  
*Thera cupressata*  
*Tinea pallescentella*  
*Tuta absoluta*  
*Typhonia beatricis*  
*Vitula edmandsii*  
*Vitula serratilineella*

#### **Mammalia<sup>xxiv</sup>**

*Bison bonasus*  
*Callosciurus erythraeus*  
*Canis aureus*  
*Castor canadensis*  
*Cervus nippon*  
*Dama dama*  
*Erinaceus roumanicus*  
*Eutamias sibiricus*  
*Genetta genetta*  
*Muntiacus reevesi*  
*Mustela eversmanii*  
*Myocastor coypus*  
*Nasua nasua*  
*Neovison vison*  
*Nyctereutes procyonoides*  
*Ondatra zibethicus*  
*Ovis gmelini musimon*  
*Procyon lotor*  
*Rattus norvegicus*  
*Spermophilus citellus*  
*Tamias sibiricus*  
*Tamias striatus*

#### **Mantodea<sup>xxv</sup>**

*Ameles spallanzania*  
*Empusa pennata*  
*Hierodula tenuidentata*  
*Hierodula spec.*  
*Hymenopus coronatus*

*Idolomantis diabolica*  
*Iris oratoria*  
*Stagmomantis carolina*  
*Tenodera sinensis*

#### **Mollusca<sup>xxvi</sup>**

*Alopiia livida*  
*Ambigolimax valentianus*  
*Archachatina marginata*  
*Arion vulgaris*  
*Bielzia coerulans*  
*Boettgerilla pallens*  
*Campylaea illyrica*  
*Ceruella cisalpina*  
*Ceruella neglecta*  
*Ceruella virgata*  
*Charpentieria itala*  
*Chilostoma cingulatum*  
*Cipangopaludina chinensis*  
*Corambe obscura*  
*Corbicula fluminalis*  
*Corbicula fluminea*  
*Corbicula largillierti*  
*Cornu aspersum*  
*Crassostrea virginica*  
*Crepidula fornicata*  
*Deroceras ceconii*  
*Deroceras invadens*  
*Deroceras klemmi*  
*Deroceras panormitanum*  
*Deroceras sturanyi*  
*Dreissena bugensis*  
*Dreissena polymorpha*  
*Drobacia banatica*  
*Emmericia patula*  
*Ensis leei (Ensis americanus,*  
*E. directus)*  
*Eobania vermiculata*  
*Euglesa compressa*  
*Ferrissia californica*  
*Gyraulus chinensis*  
*Gyraulus parvus*  
*Haminoea solitaria*  
*Hawaiiia minuscula*  
*Helicella bolenensis*  
*Helicopsis lunulata*  
*Helisoma anceps*  
*Helix lucorum*

*Hygromia cinctella*  
*Krynickyllus melanocephalus*  
*Leucomastus varnensis*  
*Limacus flavus*  
*Limacus maculatus*  
*Lissachatina fulica*  
*Lithoglyphus naticoides*  
*Lucilla scintilla*  
*Lucilla singleyana*  
*Magallana angulata*  
*(Crassostrea angulata)*  
*Magallana gigas (Crassostrea*  
*gigas)*  
*Medora almissana*  
*Melanoides tuberculatus*  
*Menetus dilatatus*  
*Micropontica caucasica*  
*Milax gagates*  
*Milax nigricans*  
*Monacha cantiana*  
*Monacha cartusiana*  
*Monacha claustralis*  
*Mulinia lateralis*  
*Musculium transversum*  
*Mya arenaria*  
*Mytilopsis leucophaeata*  
*Oxychilus draparnaudi*  
*Paralaoma servilis*  
*Petricolaria pholadiformis*  
*Physella acuta*  
*Planorbella duryi*  
*Potamopyrgus antipodarum*  
*Pseudosuccinea columella*  
*Rangia cuneata*  
*Ruditapes philippinarum*  
*Sadleriana fluminensis*  
*Sinanodonta woodiana*  
*Tandonia budapestensis*  
*Teredo navalis*  
*Testacella haliotidea*  
*Theba pisana*  
*Unio mancus*  
*Viviparus ater*  
*Xeropicta derbentina*  
*Xerotricha conspurcata*  
*Zonitoides arboreus*

#### **Myriapoda<sup>xxvii</sup>**

*Anamastigona pulchella*  
*Brachychaeteuma melanops*  
*Brachyiulus jawlowskii*  
*Brachyiulus lusitanus*  
*Cryptops anomalans*  
*Cryptops umbricus*  
*Cylindroiulus parisiorum*  
*Cylindroiulus salicivorus*  
*Cylindroiulus vulnerarius*  
*Geophilus osquidatum*  
*Henia brevis*  
*Hirudisoma pallidum*  
*Lamyctes africanus*  
*Lamyctes emarginatus*  
*Leptoiulus kervillei*  
*Lithobius lapadensis*  
*Melogona broelemanni*  
*Ophiulus germanicus*  
*Oxidus gracilis*  
*Polydesmus coriaceus*  
*Polydesmus susatensis*  
*Schendyla peyerimhoffi*  
*Scolopendra cingulata*  
*Stigmatogaster gracilis*  
*Stosatea italica*

#### **Neuropterida<sup>xxviii</sup>**

*Megistopus flavicornis*  
*Palpares libelluloides*  
*Raphidia mediterranea*

#### **Odonata<sup>xxix</sup>**

*Anax ephippiger*  
*Anax guttatus*  
*Agriocnemis pygmaea*  
*Boyeria irene*  
*Ceriagrion cerinorubellum*  
*Coengarion scitulum*  
*Crocothemis servilia*  
*Ischnura ramburii*  
*Ischnura senegalensis*  
*Lestes macrostigma*  
*Orthetrum chryso stigma*  
*Orthetrum sabina*  
*Pantala flavescens*  
*Pseudagrion microcephalum*  
*Tamea abdominalis*  
*Tamea aquila*

*Tamea basilaris*  
*Tamea basilaris burmeisteri*  
*Tamea binotata*  
*Tamea calverti*  
*Tamea carolina*  
*Tamea cophysa*  
*Tamea darwini*  
*Tamea eurybia*  
*Tamea insularis*  
*Tamea lacerata*  
*Tamea liberata*  
*Tamea limbata*  
*Tamea loewii*  
*Tamea minuta*  
*Tamea onusta*  
*Tamea phaoneura*  
*Tamea rosenbergi*  
*Tamea rustica*  
*Tamea spec.*  
*Tamea stenoloba*  
*Tamea transmarina*  
*Tamea transmarina euryale*  
*Tamea transmarina propinqua*  
*Tamea transmarina yayeyamana*  
*Tamea virginia*

#### **Opiliones<sup>xxx</sup>**

*Dicranopalpus ramosus*  
*Leiobunum religiosum*  
*Leiobunum sp. A*  
*Nemastoma bidentatum*  
*Opilio canestrinii*

#### **Orthoptera<sup>xxxi</sup>**

*Acrotylus patruelis*  
*Anacridium aegyptium*  
*Antaxius pedestris*  
*Eumodicogryllus bordigalensis*  
*Eupholidoptera megastyla*  
*Eupholidoptera spec.*  
*Eyprepocnemis plorans*  
*Grylloides sigillatus*  
*Gryllomorpha dalmatina*  
*Gryllomorpha uclensis*  
*Gryllus bimaculatus*

*Meconema meridionale*  
*Oecanthus dulcisonans*  
*Pezotettix giornae*  
*Phaneroptera nana*  
*Pholidoptera littoralis*  
*Pteronemobius lineolatus*  
*Rhacocleis annulata*  
*Rhacocleis germanica*  
*Schistocerca gregaria*  
*Tachycines asynamorus*  
*Tessellana veyseli*  
*Troglophilus neglectus*  
*Yersinella raymondii*

#### **Phasmatodea<sup>xxxii</sup>**

*Acanthoxyla geisovii*  
*Acanthoxyla inermis*  
*Bacillus atticus*  
*Bacillus rossius*  
*Carausius morosus*  
*Clitarchus hookeri*  
*Clonopsis gallica*  
*Peruphasma schultzei*  
*Ramulus artemis*  
*Sipyloidea chlorotica*  
*Sipyloidea sipyulus*

#### **„Pisces“<sup>xxxiii</sup>**

*Acipenser baerii*  
*Ameiurus melas*  
*Ameiurus nebulosus*  
*Babka gymnotrachelus*  
*Carassius auratus*  
*Carassius gibelio*  
*Carassius langsdorfii*  
*Cobitis bilineata*  
*Coregonus maraenoides*  
*Coregonus peled*  
*Ctenopharyngodon idella*  
*Gambusia affinis*  
*Gobiosoma bosc*  
*Hypophthalmichthys molitrix*  
*Hypophthalmichthys nobilis*  
*Knipowitschia caucasica*  
*Lepomis cyanellus*  
*Lepomis gibbosus*  
*Micropterus salmoides*  
*Misgurnus anguillicaudatus*



*Misgurnus bipartitus*  
*Neogobius fluviatilis*  
*Neogobius melanostomus*  
*Oncorhynchus mykiss*  
*Paramisgurnus dabryanus*  
*Perccottus glenii*  
*Pimephales promelas*  
*Poecilia reticulata*  
*Ponticola kessleri*  
*Proterorhinus semilunaris*  
*Pseudorasbora parva*  
*Salvelinus fontinalis*  
*Sander volgensis*  
*Tachysurus sinensis*  
*Umbra krameri*  
*Umbra pygmaea*

**Platyhelminthes**<sup>xxxiv</sup>  
*Arthurdendyus triangulatus*  
*Australoplana sanguinea*  
*alba*  
*Bipalium kewense*  
*Bipalium vagum*  
*Caenoplana coerulea*  
*Girardia tigrina* (*Dugesia tigrina*)  
*Kontikia ventrolineata*  
*Microplana terrestris*  
*Obama nungara*  
*Parakontikia ventrolineata*  
*Platydemus manokwari*  
*Rhynchodemus sylvaticus*

**Porifera**<sup>xxxv</sup>  
*Chalinula loosanoffi*  
*Haliclona xena*  
*Leucosolenia somesii*

**„Psocoptera“**<sup>xxxvi</sup>  
*Badonnelia titei*  
*Cerobasis annulata*  
*Dorypteryx domestica*  
*Dorypteryx longipennis*  
*Dorypteryx pallida*  
*Echmepteryx*  
*madagascariensis*  
*Ectopsocopsis cryptomeriae*  
*Ectopsocus briggsi*  
*Ectopsocus meridionalis*

*Ectopsocus petersi*  
*Ectopsocus titschacki*  
*Embidopsocus frater*  
*Lachesilla pacifica*  
*Lepinotus inquilinus*  
*Lepinotus patruelis*  
*Lepinotus reticulatus*  
*Liposcelis bostrychophila*  
*Liposcelis brunnea*  
*Liposcelis corrodens*  
*Liposcelis decolor*  
*Liposcelis entomophila*  
*Liposcelis pearmani*  
*Liposcelis pubescens*  
*Peripsocus milleri*  
*Peripsocus stagnivagus*  
*Psoquilla marginepunctata*  
*Psyllipsocus ramburii*  
*Soa flaviterminata*  
*Trichopsocus clarus*  
*Trichopsocus dalii*  
*Trogium pulsatorium*

**Psyloidea**<sup>xxxvii</sup>  
*Acizzia acaciaebaileyanae*  
*Acizzia jamatonica*  
*Agonosцена succincta*  
*Cacopsylla fulguralis*  
*Cacopsylla pulchella*  
*Calophya rhois*  
*Ctenarytaina eucalypti*  
*Ctenarytaina peregrina*  
*Euphyllura olivina*  
*Homotoma ficus*  
*Lauritrioza alacris* (*Trioza alacris*)  
*Livilla variegata*

**„Reptilia“**<sup>xxxviii</sup>  
*Chelydra serpentina*  
*Chrysemys picta*  
*Chrysemys picta belli*  
*Chrysemys picta marginata*  
*Chrysemys picta picta*  
*Graptemys ouachitensis*  
*Graptemys*  
*pseudogeographica*

*Graptemys*  
*pseudogeographica kohni*  
*Graptemys*  
*pseudogeographica*  
*pseudogeographica*  
*Hierophis viridiflavus*  
*carbonarius*  
*Macrochelys temminckii*  
*Pantherophis guttatus*  
*Podarcis liolepis*  
*Podarcis siculus*  
*Pseudemys concinna*  
*Pseudemys concinna*  
*concinna*  
*Pseudemys concinna*  
*floridana*  
*Pseudemys floridana*  
*Pseudemys nelsoni*  
*Pseudemys peninsularis*  
*Tarentola mauritanica*  
*Tarentola mauritanica juliae*  
*Tarentola mauritanica*  
*mauritanica*  
*Tarentola mauritanica*  
*pallida*  
*Trachemys scripta*  
*Trachemys scripta elegans*  
*Trachemys scripta scripta*  
*Trachemys scripta troostii*

**Scorpiones**<sup>xxxix</sup>  
*Belisarius spec.*  
*Belisarius xambeui*  
*Buthus ibericus*  
*Buthus montanus*  
*Buthus occitanus*  
*Buthus spec.*  
*Calchas gruberi*  
*Calchas spec.*  
*Euscorpius alpha*  
*Euscorpius apuanus*  
*Euscorpius aquilejensis*  
*Euscorpius balearicus*  
*Euscorpius beroni*  
*Euscorpius candiota*  
*Euscorpius carpathicus*  
*Euscorpius concinnus*  
*Euscorpius corsicanus*

<i>Euscorpius drenskii</i>	<i>Hadrurus arizonensis</i>	<i>Leucothrips nigripennis</i>
<i>Euscorpius etrusciae</i>	<i>Hadrurus spec.</i>	<i>Liothrips vaneeckei</i>
<i>Euscorpius flavicaudis</i>	<i>lurus dufourei</i>	<i>Microcephalothrips</i>
<i>Euscorpius gamma</i>	<i>lurus spec.</i>	<i>abdominalis</i>
<i>Euscorpius garganicus</i>	<i>Mesobuthus cyprius</i>	<i>Organothrips indicus</i>
<i>Euscorpius germanus</i>	<i>Mesobuthus eupeus</i>	<i>Parthenothrips dracaenae</i>
<i>Euscorpius hadzii</i>	<i>Mesobuthus gibbosus</i>	<i>Pteridothrips pteridicola</i>
<i>Euscorpius italicus</i>	<i>Mesobuthus spec.</i>	<i>Scirtothrips aurantii</i>
<i>Euscorpius koschewnikowi</i>	<i>Olivierus caucasicus</i>	<i>Scirtothrips citri</i>
<i>Euscorpius lesbiacus</i>	Scorpiones indet.	<i>Scirtothrips dorsalis</i>
<i>Euscorpius mesotrichus</i>	Scorpiones spec.	<i>Scirtothrips longipennis</i>
<i>Euscorpius mingrelicus</i>	<b>Thysanoptera<sup>xi</sup></b>	<i>Sophiothrips terminalis</i>
<i>Euscorpius naupliensis</i>	<i>Bagnalliella yuccae</i>	<i>Taeniothrips eucharii</i>
<i>Euscorpius oglasae</i>	<i>Chaetanaphothrips orchidii</i>	<i>Thrips hawaiiensis</i>
<i>Euscorpius oligotrichus</i>	<i>Dichromothrips corbetti</i>	<i>Thrips palmi</i>
<i>Euscorpius ossae</i>	<i>Echinothrips americanus</i>	<i>Thrips parvispinus</i>
<i>Euscorpius picenus</i>	<i>Frankliniella occidentalis</i>	<i>Thrips setosus</i>
<i>Euscorpius polytrichus</i>	<i>Frankliniella schultzei</i>	<i>Thrips simplex</i>
<i>Euscorpius popovi</i>	<i>Frankliniella schultzei</i>	<i>Trichromothrips billeni</i>
<i>Euscorpius scaber</i>	<i>Frankliniella schultzei</i>	<i>(Dorcadothrips billeni)</i>
<i>Euscorpius sicanus</i>	<i>Frankliniella schultzei</i>	<i>Tylothrips osborni</i>
<i>Euscorpius spec.</i>	<i>Heliiothrips haemorrhoidalis</i>	
<i>Euscorpius tauricus</i>	<i>Hercinothrips aethiopiae</i>	<b>Xiphosura<sup>xii</sup></b>
<i>Euscorpius tergestinus</i>	<i>Hercinothrips bicinctus</i>	<i>Limulus polyphemus</i>
<i>Hadrurus anzaborrego</i>	<i>Hercinothrips dimidiatus</i>	
	<i>Hercinothrips femoralis</i>	

<sup>i</sup> Olaf ZIMMERMANN in cooperation with Klaus SCHRAMEYER

<sup>ii</sup> Olaf ZIMMERMANN in cooperation with Klaus SCHRAMEYER

<sup>iii</sup> Martin SCHLÜPMANN, ROTE LISTE GREMIUM AMPHIBIEN UND REPTILIEN (2020b) & Jan Ole KRIEGS. Only *Lithobates catesbeianus* and a few taxa from the genus *Pelophylax* are established, and these can often only be identified genetically. Reproducing but not established populations are known for the three newt species mentioned. However, there is no current information on the occurrence of *Ommatotriton ophryticus* in Cologne. Paraneozoa sensu GEITER (1999) not included.

<sup>iv</sup> Hirudinea: by Uwe JUEG; other Oligo- and Polychaeta: based on ZETTLER et al. 2018 and LACKSCHEWITZ et al. 2022, with one species supplemented from the Red List by RACHOR et al. 2013

<sup>v</sup> Olaf ZIMMERMANN in cooperation with Thomas THIEME

<sup>vi</sup> Ulrich BURKHARDT

<sup>vii</sup> Hubert HÖFER, with additions from the Red List by BLICK et al. 2016

<sup>viii</sup> based on ZETTLER et al. 2018

<sup>ix</sup> Roland MÜHLETHALER

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- <sup>x</sup> Jan Ole KRIEGS, with additions by Viktor HARTUNG and from the Red List (GRÜNEBERG et al. 2016); *Columba livia* forma domestica is considered a neozoon by GRÜNEBERG et al. 2016
- <sup>xi</sup> Alban PFEIFER
- <sup>xii</sup> Based on ZETTLER et al. 2018 and LACKSCHEWITZ et al. 2022; *Craspedacusta sowerbii* added by Martin SCHLÜPMANN
- <sup>xiii</sup> Olaf ZIMMERMANN in cooperation with Klaus SCHRAMMEYER, with additions by Viktor HARTUNG based on SCHMUTTERER & HOFFMANN 2016
- <sup>xiv</sup> Hannes HOFFMANN, with additions by Olaf ZIMMERMANN and Jiří PROCHAZKA (Scolytinae)
- <sup>xv</sup> Kai SCHÜTTE and Michael L. ZETTLER, with additions from LACKSCHEWITZ et al. 2022, from the Red Lists by RACHOR et al. 2013, ZETTLER et al. 2018 and IAS-List of the EU by BRUNDU et al. 2022
- <sup>xvi</sup> Alban PFEIFFER; *Forficula smyrnensis* added by Viktor HARTUNG
- <sup>xvii</sup> Dieter DOCZKAL, Julian EBERHARDT, Karsten GRABOW
- <sup>xviii</sup> No alien species known from this group for Europe yet; the species present on observation.org were included in the challenge as a sort of positive control
- <sup>xix</sup> David TEMPELMAN. These species are not strictly speaking alien species but are included because they have recently expanded their distribution, possibly due to climate change (i.e. warmer climate), and therefore fit the scope of our challenge.
- <sup>xx</sup> Viktor HARTUNG
- <sup>xxi</sup> Hannes HOFFMANN; Stephan BLANK (Symphyta), with additions by Olaf ZIMMERMANN & Klaus SCHRAMMEYER (Parasitica)
- <sup>xxii</sup> All termite species present on observation.org were included to test for possible introductions; with the addition of the invasive species from RASPLUS & ROQUE 2010 and EVANS et al. 2013
- <sup>xxiii</sup> Robert TRUSCH, with additions by Olaf ZIMMERMANN and from the Red Lists (NUSS 2011, REINHARDT & BOLZ 2011, RENNWALD et al. 2011, TRUSCH et al. 2011)
- <sup>xxiv</sup> Jan Ole KRIEGS, with additions by Kai SCHÜTTE, from the Red List by MEINIG et al. 2020 as well as from the EU IAS-List by BRUNDU et al. 2022. *Bison bonasus* is not a neozoon, but would be considered as novel by general public and its possible occurrence in the wild or semi-wild condition is worth recording, which is why it has been included in the challenge
- <sup>xxv</sup> Alban PFEIFER, with an addition from STANICZEK 2023
- <sup>xxvi</sup> Freshwater and terrestrial species: Bernhard HAUSDORF, marine and brackish species: based on ZETTLER et al. 2018 and LACKSCHEWITZ et al. 2022
- <sup>xxvii</sup> Jörg SPELDA
- <sup>xxviii</sup> Axel GRUPPE; *Rhaphidia mediterranea* from ASPÖCK et al. 2017; *Palpares libelluloides* had been introduced to Germany in the past according to ASPÖCK et al. 2001
- <sup>xxix</sup> Christopher MOLLMANN; MARTENS 2015; SEEHAUSEN 2019. Most of the species on the list are no true neozoa and are only known from occasional introductions with aquaria or in greenhouses. Still, we included them in the challenge to be able to monitor any potential emergence in the wild. An exuvium of an unknown *Tramea*

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species had been found in Germany, so all species of this genus present on observation.org were included, to provide an ID if any specimens are registered again

<sup>xxx</sup> Based on the Red List by MUSTER et al. (2016), *Leiobunum* sp. A added by Martin SCHLÜPMANN

<sup>xxxi</sup> Axel HOCHKIRCH, with an addition by Alban PFEIFER

<sup>xxxii</sup> Four species from RASPLUS & ROQUE 2010, in addition, three European species present on observation.org that are widespread or occur in countries neighbouring Germany, and *Peruphasma schultei* that is a common terrarium pet and has already been reported outdoors in the Netherlands (NOORDIJK & NIJSEN 2020). *Ramulus artemis* and *Sipyloidea chlorotica* added by Alban PFEIFER

<sup>xxxiii</sup> Jan Ole KRIEGS, with additions from LACKSCHEWITZ et al. 2022 and from the Red Lists by THIEL et al. 2013 and FREYHOF et al. 2023

<sup>xxxiv</sup> Olaf ZIMMERMANN; *Girardia tigrina* (syn. *Dugesia tigrina*) added from ZETTLER et al. 2018

<sup>xxxv</sup> Based on ZETTLER et al. 2018 and LACKSCHEWITZ et al. 2022

<sup>xxxvi</sup> Nico SCHNEIDER, with some additions by Dieter DOCZKAL

<sup>xxxvii</sup> Daniel BURCKHARDT & Olaf ZIMMERMANN

<sup>xxxviii</sup> Martin SCHLÜPMANN, ROTE LISTE GREMIUM AMPHIBIEN UND REPTILIEN (2020a), Jan Ole KRIEGS, with additions by Kai SCHÜTTE, Martin HUSEMANN and Viktor HARTUNG as well as from the EU IAS-List (BRUNDU et al. 2022). None of the water turtle species has been able to establish themselves so far, but many released animals survive for a long time in the wild. The climatic conditions in Germany are not sufficient for most taxa. Evidence of reproduction has so far been a very rare exception for individual *Trachemys scripta*. Reproducing populations are known for *Hierophis viridiflavus carbonarius*. Paraneozoa sensu GEITIER (1999) not included. All subspecies of *Tarentola mauritanica* present on Observation.org are included in the list to address all possible identifications by the portal's AI, even though it is not certain if all subspecies have been sighted in Germany.

<sup>xxxix</sup> To monitor for possible introductions, the list includes all European species from FET 2010 along with all species of *Hadrurus* present on observation.org; *Hadrurus* is a genus widely distributed in North America, whose representatives had been intercepted in Europe in the past.

<sup>xl</sup> Manfred R. ULITZKA and Olaf ZIMMERMANN with additions from RABITSCH & NEHRING (2023) and the Red List by zur STRASSEN (2011)

<sup>xli</sup> Based on LACKSCHEWITZ et al. 2022