

## Short notes

In this section 218 species of arthropods are recorded, collected in Sardinia mainly during the researches carried out by CNBFVR (cf. Bardiani 2011). All or part of the records of most species (207) come from the Marganai and/or Montimannu wilderness areas. They belong to taxa not treated in the previous pages nor by Cerretti et al. (2009). All taxa are listed in alphabetical order according to the nomenclature and systematics of the Fauna Europaea Web Service (de Jong 2011) unless otherwise stated. Collecting sites from the region-owned forests of Marganai and Montimannu and neighbouring areas are listed under "Records", while those from other Sardinian sites are listed under "Other records". Almost all the sites investigated during the faunistic survey carried out by CNBFVR on the island are indicated with abbreviations (see further on), while all the other sites are listed in full. All sites and/or their abbreviations are listed in alphabetical order. Sites listed in full are listed after those abbreviated, alphabetically according to province. Further details on most of the sampling sites are provided by Bardiani (2011). The material, unless otherwise stated, is stored in the CNBFVR collection.

### ABBREVIATIONS

CNBFVR SAMPLING SITES. **A01** = Medio Campidano prov., Arbus, Piscinas, dune, 0 m, 32S 452927 4376897; **A02** = Medio Campidano prov., Arbus, Marina di Arbus, 10 m, 32S 454504 4383252; **A04** = Oristano prov., Arborea, Stagno di s'Ena Arrubia, 0 m, 32S 462842 4408878; **A05** = Carbonia-Iglesias prov., Buggerru, R. Mannu, foce, dune, 3 m, 32S 449437 4365545; **A06** = Carbonia-Iglesias prov., Buggerru, Cala Domestica, 10 m, 32S 446540 4358436; **A08** = Medio Campidano prov., Arbus, Capo Pecora, 15 m, 32S 446760 4367599; **A09** = Medio Campidano prov., Arbus, Piscinas, guado del R. Piscinas, 18 m, 32S 454087 4376193; **A10** = Oristano prov., San Vero Milis, sa Marigosa, spiaggia, 5 m, 32T 448490 4432720; **A11** = Oristano prov., San Vero Milis, sa Marigosa, stagno, 5 m, 32T 449217 4432397; **A12** = Cagliari prov., Domus de Maria, Torre di Chia, spiaggia di Su Portu, 1 m, 32S 490072 4305296; **A13** = Carbonia-Iglesias prov., Sant'Anna Arresi, Porto Pino, dune, 5 m, 32S 467025 4311362; **A15** = Carbonia-Iglesias prov., Gonnese, Plage Mesu, Sa Punta e s'Arena, 5 m, 32S 450884 4347330; **A16** = Carbonia-Iglesias prov., Gonnese, Fontanamare, 3 m, 32S 451423 4348717; **A17** = Carbonia-Iglesias prov., Fluminimaggiore, Portixeddu, 6 m, 32S 449437 4365741; **A18** = Carbonia-Iglesias prov., Sant'Antioco, Stagno di S. Caterina, 0 m, 32S 455569 4326716; **A19** = Carbonia-Iglesias prov., Sant'Antioco, Capo Sperone, spiaggia, 0 m, 32S 451831 4314957; **A21** = Oristano prov., Terralba, Stagno di Marceddi, 0 m, 32S 457917 4397594; **C01** = Carbonia-Iglesias prov., Iglesias, Case Marganai, 725 m, 32S 463890 4355925; **C02** = Carbonia-Iglesias prov., Iglesias, Pta Serra Pirastu, 656 m, 32S 463237 4355678; **C03** = Carbonia-Iglesias prov., Iglesias, Vecchia Cantoniera Marganai, 491 m, 32S 462272 4354677; **C05** = Carbonia-Iglesias prov., Iglesias, Pta Cungiaus, 636 m, 32S 462440 4355161; **C06** = Carbonia-Iglesias prov., Domusnovas, Grotta di S. Giovanni, 325 m, 32S 467900 4354891; **C07** = Carbonia-Iglesias prov., Domusnovas, dint. Planargia - Scoveri, 625 m, 32S 465523 4362921; **C08** = Carbonia-Iglesias prov., Domusnovas, Valle Oridda, pineta, 595 m, 32S 466970 4362400; **C10** = Medio Campidano prov., Villacidro, dint. Pta piscina Argiolas, Serbatoio, 282 m, 32S 472049 4360081; **C11** = Medio Campidano prov., Villacidro, Can.li Serci, 381 m, 32S 472208 4359497; **C12** = Medio Campidano prov., Villacidro, Can.li s'Otti, versante destro, 520 m, 32S 471690 4359611; **C13** = Medio Campidano prov., Villacidro, dint. Pta Pranu Ilixis, 563 m, 32S 471221 4359310; **C14** = Carbonia-Iglesias prov., Domusnovas, Sedda Pranu Cardu, 549 m, 32S 470926 4358924; **C15** = Carbonia-Iglesias prov., Domusnovas, Gutturu Seu, 140 m, 32S 471646 4355238; **C16** = Carbonia-Iglesias prov., Domusnovas, Gutturu Seu, 174 m, 32S 471577 4355716; **C19** = Medio Campidano prov., Villacidro, R. Cannisoni, 375 m, 32S 468713 4362692; **C20** = Medio Campidano prov., Villacidro, R. Cannisoni, 382 m, 32S 468980 4362541; **C22** = Medio Campidano prov., Villacidro, R. Cannisoni, sorg. s'acqua Frischedda, 372 m, 32S 468391 4362826; **C23** = Medio Campidano prov., Villacidro, R. Cannisoni, radura sponda sinistra, 401 m, 32S 468459 4362806; **C25** = Medio Campidano prov., Villacidro, Can.le Monincu, 450 m, 32S 468040 4363436; **C26** = Carbonia-Iglesias prov., Domusnovas, Bega d'Aleni, 621 m, 32S 467855 4361336; **C27** = Medio Campidano prov., Gonnosfanàdiga, M. Idda, strada per M. Linas, 474 m, 32S 466946 4368997; **C28** = Medio Campidano prov., Gonnosfanàdiga, sa Pta de s'Erbaceu, strada per M. Linas, 744 m, 32S 465989 4368410; **C29** = Medio Campidano prov., Gonnosfanàdiga, Genna Mirratta, 794 m, 32S 465363 4366138; **C30** = Medio Campidano prov., Gonnosfanàdiga, dint. Ovile Linas, 710 m, 32S 466346 4365201; **C31** = Carbonia-Iglesias prov., Domusnovas, L. Siuru, 322 m, 32S 467069 4357916; **C32** = Medio Campidano prov., Villacidro, L. di Montimannu, diga, 255 m, 32S 475380 4363486; **C33** =

Carbonia-Iglesias prov., Domusnovas, dint. P.ta Planotzara, 360 m, 32S 465515 4356209; **C34** = Carbonia-Iglesias prov., Domusnovas, R. sa Duchessa, greto del R., 270 m, 32S 466700 4356979; **C35** = Carbonia-Iglesias prov., Iglesias, Mamenga, 610 m, 32S 462170 4356618; **C36** = Medio Campidano prov., Villacidro, dint. L. di Montimannu, lungo T. Leni, 256 m, 32S 474156 4363150; **C39** = Carbonia-Iglesias prov., Iglesias, Cuccuruneddu, hill top, 708 m, 32S 472379 4357784; **C41** = Carbonia-Iglesias prov., Domusnovas, su Pranu Pirastu, 147 m, 32S 471365 4353536; **C42** = Carbonia-Iglesias prov., Iglesias, Conca Margiani, 750 m, 32S 462440 4356936; **C43** = Carbonia-Iglesias prov., Iglesias, Conca Margiani, radura, 725 m, 32S 462470 4357011; **C44** = Carbonia-Iglesias prov., Iglesias, Conca Margiani, radura lungo strada, 700 m, 32S 462635 4356866; **C45** = Carbonia-Iglesias prov., Iglesias, dint. P.ta Genna Ollioni, 750 m, 32S 462840 4356811; **C46** = Medio Campidano prov., Villacidro, R. Cannisoni, 400 m, 32S 468858 4362543; **C47** = Carbonia-Iglesias prov., Domusnovas, Valle Oridda, sorg., 590 m, 32S 466681 4362696; **C48** = Carbonia-Iglesias prov., Domusnovas, P.ta Piloni de sa Figù, 750 m, 32S 465958 4360742; **C49** = Medio Campidano prov., Villacidro, T. Leni, 300 m, 32S 471317 4360510; **C50** = Medio Campidano prov., Villacidro, C. Sarais, 251 m, 32S 474215 4361145; **C51** = Carbonia-Iglesias prov., Iglesias, dint. P.ta Campu Spina, 760 m, 32S 462466 4358236; **C52** = Carbonia-Iglesias prov., Iglesias, dint. S. Benedetto, 550 m, 32S 459499 4358405; **C53** = Medio Campidano prov., Gonnosfanàdiga, M. Linas, P.ta su Filixi, 780 m, 32S 465819 4368289; **C54** = Medio Campidano prov., Gonnosfanàdiga, M. Linas, Genna su Padenti, 853 m, 32S 465485 4367656; **C55** = Medio Campidano prov., Gonnosfanàdiga, M. Linas, Genna Mirratta, sorgente, 793 m, 32S 465136 4366226; **C56** = Medio Campidano prov., Gonnosfanàdiga, M. Linas, Genna sa Xirra, 847 m, 32S 464114 4366023; **C58** = Medio Campidano prov., Villacidro, dint. P.ta piscina Argiolas, rigagnolo, 282 m, 32S 472049 4360081; **C59** = Medio Campidano prov., Villacidro, dint. M. Anzeddu, 500 m, 32S 469031 4361072; **C60** = Carbonia-Iglesias prov., Domusnovas, dint. Gutturu Abis, 580 m, 32S 468140 4360761; **C61** = Carbonia-Iglesias prov., Domusnovas, dint. P.ta su Fenu, 250 m, 32S 467159 4356713; **C63** = Carbonia-Iglesias prov., Iglesias, dint. P.ta Fenu, 300 m, 32S 472097 4357122; **C64** = Carbonia-Iglesias prov., Iglesias, dint. P.ta Fenu, 225 m, 32S 471850 4356980; **C66** = Carbonia-Iglesias prov., Buggerru, dint. Grugua, 530 m, 32S 454376 4359900; **C67** = Carbonia-Iglesias prov., Buggerru, dint. Miniera S. Luigi, 347 m, 32S 452771 4358704; **C68** = Carbonia-Iglesias prov., Domusnovas, dint. sa Duchessa, 320 m, 32S 466164 4358209; **C69** = Carbonia-Iglesias prov., Domusnovas, dint. sa Duchessa, strada per Perda Niedda, 350 m, 32S 466233 4359025; **C70** = Carbonia-Iglesias prov., Iglesias, dint. Case Marganai, 660 m, 32S 463341 4356196; **C71** = Carbonia-Iglesias prov., Domusnovas, dint. P.ta Genna Ollioni, 650 m, 32S 463293 4356570; **C72** = Carbonia-Iglesias prov., Domusnovas, dint. P.ta Planotzara, 309 m, 32S 465718 4356515; **C74** = Medio Campidano prov., Villacidro, dint. T. Leni, eucalipteto, 300 m, 32S 469793 4361088; **C77** = Carbonia-Iglesias prov., Iglesias, dint. Case Marganai, car net from C85 to C01, 650 m; **C80** = Carbonia-Iglesias prov., Domusnovas, M.ti Marganai, Miniera Reigraxius, 465 m, 32S 464160 4357039; **C81** = Carbonia-Iglesias prov., Domusnovas, Valle Oridda, 643 m, 32S 465399 4362770; **C82** = Carbonia-Iglesias prov., Iglesias, M.ti Marganai, Tintillonis, 480 m, 32S 462590 4355061; **C84** = Carbonia-Iglesias prov., Iglesias, S. Benedetto, 500 m, 32S 459882 4357019; **C85** = Carbonia-Iglesias prov., Iglesias, M.ti Marganai, 540 m, 32S 463010 4355249; **G01** = Nuoro prov., Oliena, M. Maggione, 624 m, 32T 535451 4456520; **G02** = Nuoro prov., Oliena, P.ta sos Nidos, 986 m, 32T 536075 4456422; **G03** = Nuoro prov., Oliena, Oliena, 424 m, 32T 534746 4457479; **G04** = Nuoro prov., Orgosolo, Oristillai, 947 m, 32T 529688 4446725; **G05** = Ogliastra prov., Seui, dint. M. Tonneri, 876 m, 3 S 530745 4410020; **G06** = Ogliastra prov., Seui, dint. M. Tonneri, sorg. Nuletta, 892 m, 32S 531716 4412341; **G07** = Ogliastra prov., Seui, dint. M. Tonneri, Sa ucca 'e su Oe, 912 m, 32S 531228 4413496; **G08** = Ogliastra prov., Seui, dint. M. Tonneri, 919 m, 32S 530651 4412895; **G09** = Cagliari prov., Villanovatulo, dint. Nuraghe is Cangialis, 373 m, 32S 517956 4400645; **G11** = Cagliari prov., Sinnai, dint. M. Castangia, 584 m, 32S 532700 4351568; **G12** = Cagliari prov., Burcei, dint. Burcei, 631 m, 32S 528639 4356088; **G13** = Cagliari prov., Burcei, dint. Burcei, 725 m, 32S 528219 4356591; **G14** = Cagliari prov., Burcei, dint. P.ta Serpeddì, 785 m, 32S 526996 4356738; **G15** = Cagliari prov., Burcei, dint. P.ta Serpeddì, 954 m, 32S 525266 4356808; **G31** = Medio Campidano prov., Gesturi, Giara di Gesturi, 568 m, 32S 495926 4401318; **G35** = Nuoro prov., Lodé, S. Anna, strada per Siniscola, 490 m, 32T 554459 4491980; **G36** = Nuoro prov., Lula, dint. Lula, 530 m, 32T 542525 4480254; **G39** = Ogliastra prov., Talana, dint. Talana, 478 m, 32T 542523 4433941; **G41** = Ogliastra prov., Gairo, M. Perda Liana, 1219 m, 32S 535096 4417848; **G44** = Nuoro prov., Desulo, R. Aratu, 958 m, 32T 521882 4431913; **G46** = Nuoro prov., Gadoni, F. Flumendosa, riva, 402 m, 32S 516364 4416019; **G49** = Cagliari prov., Nurri, dint. Nuraghe Tacquara, fontana, 533 m, 32S 515371 4395479; **G50** = Oristano prov., Cabras, Tharros, 9 m, 32S 452048 4414023; **G51** = Cagliari prov., Vallermosa, dint. Cant. de s'Acquacotta, 83 m, 32S 483910 4361992; **G52** = Ogliastra prov., Seui, dint. M. Tonneri, 825 m, 32S 533277 4411585; **G54** = Ogliastra prov., Gairo, M. Tonneri, lecceta, 1020 m, 32S 530263 4415529; **G55** = Ogliastra prov., Gairo, M. Tonneri, dint. nuraghe Ardassai, lecceta, 1020 m, 32S 529111 4415819; **G56** = Ogliastra prov., Seui, Seui, 800 m, 32S 527585 4409970; **S1** = Carbonia-Iglesias prov., Iglesias, dint. colonia Beneck, 636 m, 32S 462391 4355441; **S2** = Carbonia-Iglesias prov., Domusnovas, sa Duchessa, 371 m, 32S 464990 4358384; **S3** = Carbonia-Iglesias prov., Domusnovas, Valle Oridda, 592 m, 32S 466973 4362228; **SAR1** = Carbonia-Iglesias prov., Iglesias, Marganai, plot CONECOFOR SAR1, 700 m, 32S 462853 4355582.

COLLECTORS. AB = A. Briganti; AD = A. Dodero; AK = A.H. Krausse; AM = A. Campanaro; AMo = A. Molinu; AT = A. Tenga; BM = B. Merz; CG = C. Giusto; CM = C. Meloni; CT = C. Torti; DA = D. Avesani; DB = D. Birtele; DD = D. Deidda; DW = D. Whitmore; EB

= E. Braga; EG = E. Gatti; EM = E. Minari; FC = F. Chessa; FM = F. Mason; FMa = F. Mazzocchi; GC = G. Chessa; GGa = G. Gardini; GGr = G. Grafitti; GN = G. Nardi; GS = G. Scaglioni; GZ = G. Zandi; IMA = I. Marcellino; JW = J. De Waele; LB = L. Briganti; L? = no collector mentioned; LF = L. Fancello; LS = L. Spada; MA = M. Armeni; MB = M. Bardiani; ME = M. Eggenberger; MM = M. Mei; MMu = M. Mucedda; MR = M. Rampini; MT = M. Tisato; MTr = M. Trizzino; MZ = M. Zapparoli; NS = N. Sanfilippo; PA = P. Audisio; PCe = P. Cerretti; PCo = P. Cornacchia; PL = P. Leo; RA = R. Argano; RM = R. Manconi; RRz = R. Rizzerio; SRi = S. Riese; SZ = S. Zoia; VC = V. Cottarelli; VV = V. Vomero.

SAMPLING METHODS. al = collecting at light; ba = bait (small pieces of meat mixed with hay placed in an open plastic tube); bz = glass trunk trap (beer and sugar); cn = car net; dc = direct collecting; lt = light trap; mt = Malaise trap; nt = hand net; oe = entomological umbrella; pt = pitfall trap (vinegar and salt); sn = sweep net; vg = sieve; wn = water net; wt = window flight trap.

OTHER ABBREVIATIONS AND RECURRENT TERMS USED IN FAUNISTIC LIST. C. = Casa = House; Can.le = Canale = Canal; Can.li = Canali = Canals; Cant. = Cantoniera = Roadman's house; coll. = collection; D = deutonymph/s; dint. = surroundings of; ex = specimen/s; dune = dunes; eucalipreto = eucalyptus plantation; foce = river mouth; F. = Fiume = River; Foresta = Forest; fontana = fountain; greto del = bed of [river]; Grotta = Cave; ingresso = entrance of; Isola = Island; L. = Lago = Lake; lecceta = holm-oak forest; leg. = collector/s; litoranea = coastal road; loc. = locality; Miniera = Mine; M. = Monte = Mount; M.ti = Monti = Mounts; P = protonymph/s; pineta = pinewood; prov. = province; P.ta = Punta = Peak; R. = Rio = stream; radura = clearing; radura con = clearing with; radura lungo strada = clearing alongside road; reg. = region; rigagnolo = rivulet; riva = bank; S. = San/Santa/Santo = Saint; sdb = same data but; Serbatoio = Reservoir; sorg. = sorgente = spring; sotto corteccia = under bark; spiaggia = beach; sponda sinistra = left bank; Stagno = Pond; strada = road; strada per = road to; su cadavere di = on carcass of; T. = Torrente = Torrent; tfi = translation from Italian; Tr = tritonymph/s; versante = slope; Valle = Valley; verso = in direction of; wdc = without date of collection.

DEPOSITORIES. CGG = G. Gardini collection (Genoa, Italy); CGN = G. Nardi collection (Cisterna di Latina, Latina, Italy); CGP = G. Platia collection (Gatteo, Forlì-Cesena, Italy); CKR = K. Rognes collection (Stavanger, Norway); CMM = M. Mei collection (Rome, Italy); CNBFVR = Centro Nazionale per lo Studio e la Conservazione della Biodiversità Forestale "Bosco Fontana" di Verona (Marmirolo, Mantua, Italy); CPC = P. Cornacchia collection (Porto Mantovano, Mantua, Italy); MHNG = Muséum d'histoire naturelle (Genève, Switzerland); MSNM = Museo Civico di Storia Naturale di Milano (Milan, Italy); MCZR = Museo Civico di Zoologia (Rome, Italy); TCUB = M. von Tschirnhaus collection, University of Bielefeld (Bielefeld, Germany); ZSM = Zoologische Staatssammlung München (Munich, Germany).

#### Quotation-sample of single notes:

Podenas S., 2011. Short notes 15. Diptera, Limoniidae, pp. 862-866. In: Nardi G., Whitmore D., Bardiani M., Birtele D., Mason F., Spada L. & Cerretti P. (eds), Biodiversity of Marganai and Montimannu (Sardinia). Research in the framework of the ICP Forests network. Conservazione Habitat Invertebrati, 5. Cierre Edizioni, Sommacampagna, Verona.

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Morocco, with additional notes on Spanish *H. calpensis* Angus, 1988 (Coleoptera: Helophoridae). *Aquatic Insects*, 31 (4): 293–299.

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## 7. Coleoptera, SCYDMAENIDAE

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The Scydmaenidae live in the shallow ground stratum in rotting vegetable piles and leaf litter, sometimes in wet mosses and under stones, but always in good humidity conditions. They are sometimes associated with ants. Their feeding habits are mainly carnivorous and predatory. Some species are equipped with functional wings with which they perform short flights. Many species show wide distributional ranges, but they are generally uncommon.

According to bibliographic and web-based data, there are little less than 5,000 known Scydmaenidae species in the world, comprised in about 90 genera and distributed in all continents except for Antarctica. Just over 500 species occur in Europe, approximately 200 of which are recorded from Italy and its islands. Especially regarding the Palaearctic Region, the taxonomy and nomenclature of this family are often dubious due to the uncertain identity of many taxa described by early authors, because at that time no studies were available concerning the male terminalia. Some species have probably since been re-described under different names due to the poor and raw original descriptions, based upon a few external characters only. Sometimes, there is no certain correspondence between a taxon and its name as currently used in the literature. There are several likely cases of synonymy as well as many subspecies based only on one or two individuals from a single location (Castellini 2006).

The Scydmaenidae have recently been placed within the Staphylinidae (Grebennikov & Newton 2009), based on an accurate cladistic analysis using molecular and both larval and adult morphological characters of some of the species included in the so-called "Staphylinine Group". According to the cladistic analysis

of these authors, the Scydmaenidae are not an independent family but a subfamily of the Staphylinidae. Similarly, Newton & Thayer (1995) downgraded the Pselaphidae to a subfamily of the Staphylinidae, an issue upon which I recently commented with some general and specific remarks (Castellini 2001) which I also report here as they are applicable also to the Scydmaenidae. Phylogenetic research and classification are two separate things, carry different assumptions and aims and do not necessarily coincide. Phylogenetic research in systematics is a mere hypothesis about the evolutionary path of a certain group of organisms, a hypothesis that only attempts to reflect biological reality. At the same time, classification does not necessarily reflect biological reality: it is simply a means of containing and managing taxonomic information, logically organised within a hierarchical structure. Phylogenetic research is a knowledge tool, while classification is a working tool. Categories on which a phylogenetic inference or a classification are based are totally arbitrary regarding characters and the criteria used to define them (except for the "species" category, the only one confirmed by biological parameters). In its constituent elements, the classification proposed by Grebennikov & Newton (2009) is the same as those found in previous publications on the family (Newton & Franz 1998; Löbl & Smetana 2004): the taxa in the different categories (family, subfamily and tribe) are the same, but the categories have different names; the labels are different, but the content is the same. Today, the term "family" is commonly used in natural history in the need to apply, to a certain classification category, all the features that this term used to have in human relationships. Independent of any phylogenetic considerations, the "family" category defines a certain group of individuals, a group that is immediately recognisable for its features and morphological homogeneity; for over two centuries, the "family" category has been used in natural history as a fundamental rank of natural life organisation. Irrespective of Grebennikov & Newton's (2009) results about previously unknown phylogenetic affinities (I will not express an opinion on this subject), there is no reason to change a suitable and widely used naming method. In other words, assuming that the group of organisms considered today as a subfamily is the same known yesterday as a family, there is no reason to modify the name of the category which describes them. The Scydmaenidae share affinities, resemblances, most of all in their appearance but also phylogenetically, even for beginners. The Scydmaenidae are a family, for phylogenetic reasons and for practical reasons.



The genera and species are listed alphabetically according to the nomenclature of Löbl & Smetana (2004). All material examined is kept in the CNBFVR collections except for a single specimen of *Eutheia plicata* (Gyllenhal, 1813) from S1, which is kept in the author's collection.

*Eudesis aglena* Reitter, 1882

RECORDS. **Carbonia-Iglesias prov.:** Domusnovas, Sa Duchessa, 350 m, 10.I.1986, LF PL, 1 ex; Iglesias, Mamenga, 430 m, 7.IV.2000, LF, 1 ex (Fancello et al. 2009). **Medio Campidano prov.:** Fluminimaggiore 29.III.1912, AD (Binaghi 1948); Villacidro, paese [= in town], 260 m, 1.I.1986, PL, 3 ex (Fancello et al. 2009).

NOTES. Sardinian endemic, known so far only from few localities in western Sardinia; its occurrence in Corsica, still mentioned in some recent works, should be refused (cf. Fancello et al. 2009).

*Eudesis minima* Binaghi, 1948

RECORDS. **Carbonia-Iglesias prov.:** Domusnovas, Gutturu di Monte Nieddu, 290 m, 22.V.1985, 13.IV.1990, LF PL, 5 ex (Fancello et al. 2009); Fluminimaggiore, 29.III.1912, AD, type series, 2 ex (Binaghi 1948: 36); Iglesias, Mamenga, 430 m, 7.IV.2000, LF, 1 ex (Fancello et al. 2009).

NOTES. Species seemingly endemic of SW Sardinia; it was described from Fluminimaggiore (cf. Fancello et al. 2009).

*Eutheia plicata* (Gyllenhal, 1813)

RECORDS. **C11:** 7.IX.2006, DA MB DB GN, It, 1 ♂. **C31:** 12.XI.2006, GN, dc under stones, 1 ♀. **C85:** 3–4.IX.2003, DB PCe EM MT DW, mt, 1 ♂; 14–29.IX.2003, DB PCe EM MT DW, mt, 1 ♀. **S1:** 5–19.IX.2006, GC, mt, 1 ♂ 1 ♀.

NOTES. The copulatory structures of this species were defined by Palm & Bergvall (1950: 121) and Franz (1971: 59). It is known from the whole of Europe (Vit 2004: 223). As no detailed notes are available for Sardinia, the species must be considered new to the fauna of the island.

*Eutheia schaumii* Kiesenwetter, 1858

RECORDS. **C85:** 29.IX–21.X.2003, DB PCe EM MT DW, mt, 1 ♀.

NOTES. The general and particular morphological fea-

tures of this species were illustrated by Franz (1971: 62) and Besuchet (1971: 274). It is reported from the whole of the West Palaearctic (Vit 2004: 223). The only literature record from Sardinia can be found in Porta (1926: 273) and is based on works of the late 19<sup>th</sup> century, with no reference to aedeagal structures; consequently, the present record must be considered as a possible confirmation of this species in Sardinia.

*Scydmorephes fimbriatus* Castellini, 1987

RECORDS. **C58:** 12.IX.2006, DA MB DB GN, It, 3 ♀♀.

NOTES. A species described from Sardinia and known only from a few localities on the island: Golfo Aranci, Dorgali, Esterzili and Narcao (Castellini 1987: 120).

The habitats in which Scydmaenidae live require, in most cases, to be searched specifically using appropriate methods and instruments. Large amounts of gathered soil and litter must be washed and sieved, and subsequently placed in proper percolating devices that allow the gathering of individuals as the medium gradually dries. Considering the extension of the two study areas and the collecting methods used, the paucity of results is obvious. The above-listed material does not allow for many considerations about the Sardinian scydmaenid fauna, but it is sufficient to add new elements of knowledge. It is noteworthy that three of the five species listed above are endemic: about 30 Scydmaenidae are endemic to the Corso-Sardinian area (Vit 2004), and characterise the assemblages of these two islands. As for the insularity of Sardinia and the results of genetic drift in populations living in separate areas, the existence of further, undescribed endemics should be expected on the island.

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## 8. Coleoptera, STAPHYLINIDAE PSELAPHINAE

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Pselaphine beetles are predacious on collembolans and mites, and are distributed worldwide, particularly in tropical regions, with a total of approximately 8,900 species. They can be found in a variety of habitats characterized by medium to high humidity levels. Over half of the 352 species recorded for Italy are endemic (Poggi & Sabella 2005; Poggi et al. 2008). The species are hereunder listed alphabetically ac-

ording to Löbl & Besuchet (2004).

### *Bryaxis subdentatus* (Doderò, 1919)

RECORDS. **C06**: 12.VI.2004, GN, vg in detritus at the base of a rock outside cave, 1 ♂. **C70**: 14.XI.2006, MB GN MZ DW, vg in a holm-oak forest, 1 ♂ 1 ♀. **C72**: 14.XI.2006, GN MZ, vg in a holm-oak forest, 1 ♀.

NOTES. A Sardinian endemic occurring only in the south-western part of the island, from the Oristano area down to the Iglesias and Sulcis areas, including the island of Sant'Antioco; locally abundant in sievings. It is substituted in the rest of the island by two endemics belonging to the same group of species: *B. difficilis* (Reitter, 1884) and *B. odontogena* (Doderò, 1919) (Poggi & Sabella 2005).

### *Trimium amplipenne* Reitter, 1908

RECORDS. **Medio Campidano prov.**: Villacidro (Poggi 1992; Poggi & Sabella 2005); Villacidro, San Sisinnio, 250 m, 8.V.1986, 24.IV.1990, 7.V.1991, PL, 10 ex (Fancello et al. 2009).

NOTES. Sardinian endemic, widespread throughout Sardinia (Poggi 1992, Poggi & Sabella 2005).

### *Trissemus olivieri* (Raffray, 1871)

RECORDS. **S1**: 21.III–4.IV.2006, GC, mt, 1 ♂.

NOTES. Species reported from the central-western Mediterranean Basin, reaching the Atlantic coasts of North Africa and the Canary Islands. Quite common throughout Sardinia, including Sant'Antioco Island, and usually associated with humid areas (Poggi & Sabella 2005).

### *Tychobythinus dentimanus* (Reitter, 1884)

RECORDS. **C77**: 9.VI.2004, DB PCe GN MT DW, cn, 1 ♂. **Carbonia-Iglesias prov.**: Domusnovas (Poggi 1992); Domusnovas, Gutturu di Monte Nieddu, 290 m, 10.I.1986, LF PL, 1 ex; Domusnovas, Valle di Oridda, 570 m, 12.II.1992, LF PL, 1 ex; Iglesias, Mamenga, 430 m, 1.III.2006, LF, 1 ex (Fancello et al. 2009). **Medio Campidano prov.**: Villacidro (Poggi 1992).

NOTES. A Sardo-Corsican endemic, occurring only in the Bonifacio area in Corsica and moderately widespread throughout Sardinia from north to south, including some of the smaller islands (La Maddalena, Caprera, Figarolo, Toro, San Pietro and Asinara) (Poggi & Sabella 2005).