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Scorpions (Arachnida Scorpiones) of the United Kingdom Overseas Territories: current knowledge and future directions

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ABSTRACT Current knowledge on the diversity, distribution, ecology and medical importance of the scorpions from the United Kingdom Overseas Territories (UKOTs) is synthesised and discussed. Scorpions are absent from British Antarctic and British Indian Ocean territories, the Falkland Islands, the Pitcairn Islands, and South Georgia and the South Sandwich Islands. No scorpions are native to Bermuda, but a single stowaway buthid has previously been detected and successfully intercepted. The remaining territories all contain endemic or long-term established introduced species, which is discussed in detail for each territory. Maps of the distribution of endemic and non-endemic taxa are presented, alongside photographs of specimens in life. Future research directions, particularly the need for additional research in biodiversity hotspots of the Caribbean, are discussed.

KEY WORDS Biogeography; buthid; distribution; endemic; introduced; medical importance.

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INTRODUCTION

Scorpions are perhaps, after spiders, one of the most recognisable and charismatic of the arachnid orders. Currently, over 2800 species are known worldwide (Ove Rein, 2024). Scorpions have important relevance in macroecological (e.g. Foerster et al., 2019; Lira et al., 2023) and microecological (Polis & Farley, 1980; Lira et al., 2015; Goodman & Esposito, 2020) systems. Their unmistakable habitus also makes them an important aspect of human culture (Cloudsley-Thompson, 1990; Armas, 1998, 2001a, 2011; Armas & Abud Antun, 2000; Gonzalez-Ponce et al., 2023), whilst the 'sting in the tail' can also be of the upmost medical importance (Keegan, 1980; Lucas & Meier, 2017; Amr et al., 2021).

The United Kingdom Overseas Territories (UKOTs) consist of fourteen territories: Anguilla; Bermuda; British Antarctic Territory; British Indian Ocean Territory; British Virgin Islands; Cayman Islands; Falkland Islands; Gibraltar; Montserrat; Pit-

cairn Islands; Saint Helena, Ascension and Tristan da Cunha; South Georgia and the South Sandwich Islands; Turks and Caicos Islands, and the Sovereign Base Areas of Akrotiri and Dhekelia (Fig. 1). Of these, scorpions have hitherto never been recorded from British Antarctic Territory, British Indian Ocean Territory, the Falkland Islands, the Pitcairn Islands or South Georgia and the South Sandwich Islands. Bermuda has no native or established scorpions to date, however a single stowaway buthid scorpion, *Centruroides vittatus* (Say, 1821), was intercepted by biosecurity agents in 2018 (Government of Bermuda, 2018). The other territories do have established populations of scorpions.

In the South Atlantic Ocean UKOTs, scorpions have been recorded from two islands: Saint Helena (Benoit, 1977; Ashmole & Ashmole, 2000) and Ascension Island (Duffey, 1964; Ashmole & Ashmole, 1997, 2000), but not from Tristan da Cunha (inclusive of Inaccessible Island, Gough Island, and the Nightingale Islands) which makes up the third part of the territory of Saint Helena, Ascension and Tristan da Cunha. Conversely, with the exception of Bermuda (see above), all of the New World UKOTs are known to host scorpions (Armas, 1988, 2001b, 2018; Dupré & Armas, 2021). Finally, in Europe, Gibraltar has a single indigenous species (Gantenbein, 2004), and the Sovereign Base Areas of Akrotiri and Dhekelia located on the island of Cyprus is within the distribution range of two species which are endemic to the island of Cyprus as a whole (Gantenbein et al., 2000).

In this work, we synthesise current knowledge on the diversity, distribution, ecology, and medical importance of the scorpions of the UKOTs. Such a compilation of information on scorpions of the UKOTs has not existed previously and our aim is to provide a resource to biologists, conservationists, medical professionals and other stakeholders who would otherwise need to consult a large array of scattered publications. Furthermore, we note future directions of research which could continue to improve the knowledge of these taxa, and to benefit their conservation.

MATERIAL AND METHODS

The distribution of scorpions on UKOTs was obtained from the literature (see References), examination of museum material by D. Sherwood (DS) and L.F. de Armas (LFA), and fieldwork by DS and L. Fowler (LF) on Saint Helena and Adam Sharp (AS) on Ascension Island. Taxonomic iden-

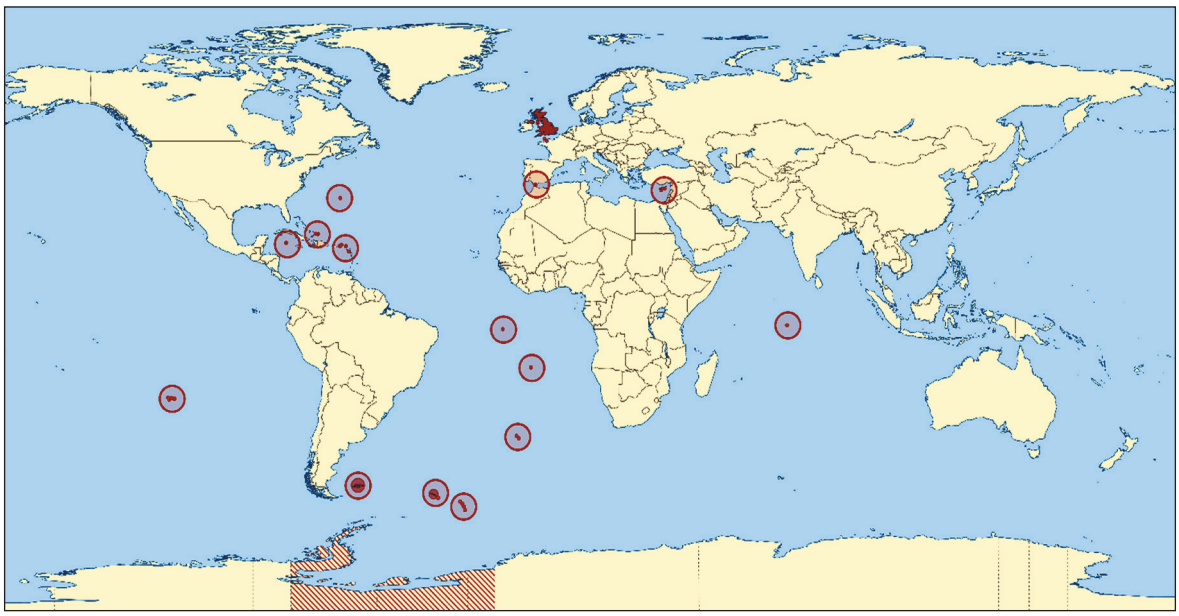

Figure 1. The United Kingdom Overseas Territories (British Antarctic Territory marked in red lines). Adapted from 'United Kingdom (+overseas territories and crown dependencies) in the World (+Antarctica claims).svg' by user 'TUBS' under Creative Commons licence CC BY-SA 3.0.

tification of scorpions not already included in consulted literature was confirmed by DS and LFA. Maps were made using the Quantum Geographical Information System (QGIS, 2023). Understanding and compiling information on endemicity, indigenous and introduced species is important for invertebrate conservation (e.g. Ashmole & Ashmole, 2000), we indicate endemic species in the text as [END], indigenous species as [IND], and introduced species as [INT] so that the presence/absence of endemic species of scorpions can be rapidly ascertained from the checklist.

RESULTS AND DISCUSSION

The scorpion fauna of the UKOTs is represented by two families (Buthidae C.L. Koch, 1837 and Diplocentridae Karsch, 1880), seven genera and 12 species. The most diverse family is Buthidae, with five genera (*Buthus* Leach, 1815; *Centruroides* Marx, 1890; *Hottentotta* Birula, 1908; *Isometrus* Ehrenberg, 1828, and *Microtityus* Kjellesvig-Waering, 1966) and 10 species. The Diplocentridae is represented by only two genera (*Heteronebo* Pocock, 1899 and *Oiclus* Simon, 1880), with one species each. The most diverse genus is *Centruroides*, with six species known from the UKOTs, all from the West Indies. At least three of the aforementioned scorpion species are endemics, whereas others are either more widely-distributed Caribbean species or are introduced species. Both *I. maculatus* and *H. hottentotta* (but especially the former) are distributed around the world as a result of transportation by humans. In the first part of this work, we review the current knowledge for UKOTs scorpions.

Scorpions from Ascension Island and Saint Helena Island

Ascension Island (7°56'S, 14°22'W): *Hottentotta hottentotta* (Fabricius, 1787) [INT] and *Isometrus maculatus* (DeGeer, 1778) [INT].

Saint Helena (15°57'S, 5°43'W): *Isometrus maculatus* [INT].

Remarks. *Isometrus maculatus* is the only species present on Saint Helena, first recorded by O. Pickard-Cambridge (1870) as two different species (*Lychas maculatus* and '*Lychas americanus'*, the latter name now considered to simply refer to *I. maculatus* per Fet, Braunwalder & Cameron, 2002) and can be found in all arid coastal areas of the island (Benoit, 1977; Ashmole & Ashmole, 2000; DS and LF, pers. obs.). This species has not been found in the uplands (e.g. cloud forest) as

Figure 2. *Isometrus maculatus* (DeGeer, 1778) adult female *in situ*, Heart-shaped Waterfall, Saint Helena. Photo credit: Danniella Sherwood.

Figure 3. *Hottentotta hottentotta* (Fabricius, 1787) adult female *in situ*, Georgetown, Ascension Island. Photo credit: Adam Sharp.

of yet. A visual record (Fig. 2) of a large female by DS under a rock at Heart Shaped Waterfall (15°56'53"S, 5°42'55"W) provides a record from a more humid habitat than previous records from areas like Prosperous Bay Plain, Horse Point Plain, and Broad Gut, indicating this species might be able to gradually spread into less arid areas of the island due to its adaptability. *Hottentotta hottentotta* (Fig. 3) is recorded from Ascension (alongside *I. maculatus* which is fairly common at intermediate elevation, 200–500 m) but not on Saint Helena. In Ascension, *H. hottentotta* appears to have not colonised other parts of the island since its initial (and thought to be restricted, as a stowaway) records from Georgetown by Ashmole & Ashmole (1997, 2000) and is restricted to Georgetown (AS pers. obs.).

REFERENCES. Benoit, 1977; Ashmole & Ashmole, 1997, 2000.

Scorpions from Gibraltar

Gibraltar (36°08'N, 5°21'W): *Buthus* cf. *ibericus* Lourenco et Vachon, 2004 [IND].

REMARKS. The specific identity of the only recorded scorpion from Gibraltar has not been established with certainty. Ythier (2021: 1) and Dupré (2021: 4, 2022: 2) mentioned *B. ibericus* as present in Gibraltar, but they did not mention neither examined material nor a precise locality. It is important that voucher specimens are collected by future workers to confirm the identity of the species on Gibraltar although the distribution of *B. ibericus* on nearby areas of mainland Spain do render this species most likely. Until a proper study is conducted, we follow the Gibraltar Nature Reserve Management Plan (2019) in considering this population more cautiously as *Buthus* cf. *ibericus*.

REFERENCES. Ythier, 2021; Dupré, 2021, 2022.

Scorpions from the Sovereign Base Areas (SBAs) of Akrotiri and Dhekelia

Akrotiri Base Area (34°35'N, 32°59'E)*: Aegaeobuthus cyprius* (Gantenbein et Kropf, 2000) [IND], *Buthus kunti* Yağmur, Koç et Lourenço, 2011 [IND]

Dhekelia Base Area (34°59'N, 33°38'E): *A. cyprius* [IND]

REMARKS. We newly record *Buthus kunti* Yağmur, Koç et Lourenço, 2011 (Fig. 4) from the

Figure 4. *Buthus kunti* Yağmur, Koç et Lourenço, 2011 adult female *in situ*, Akrotiri Sovereign Base Area. Photo credit: Vsevolod Rudyi.

Figure 5. *Aegaeobuthus cyprius* (Gantenbein et Kropf, 2000) adult female *in situ*, from area outside of the SBAs (Pano Panagia, Cyprus). Photo credit: Julien Touroult.

Akrotiri Sovereign Base Area based on an observation from iNaturalist (2023a). *Aegaeobuthus cyprius* (Gantenbein & Kropf, 2000) (illustrated here from a specimen from Cyprus, outside of the SBAs, Fig. 5) can be found in both Sovereign Base Areas.

References. Gantenbein et al., 2000; iNaturalist, 2023a.

Scorpions from the Caribbean UKOTs

Anguilla

Anguilla (18°13’00” N, 63°03’00” W): *Centruroides barbudensis* (Pocock, 1898) [IND], *I. maculatus* [INT].

Prickely Pear Cays (18°15’51.0”N 63°10’19.0”W): *C. barbudensis* [IND].

Sombrero (18°35’21”N, 63°25’31”W): *C. barbudensis* [IND].

Remarks. We newly record *Centruroides barbudensis* (Pocock, 1898) from the Prickely Pear Cays (Fig. 6). Hitherto, in the context of the UKOTs, it was recorded in the published literature from two localities: Sombrero and the main island of Anguilla.

References. Armas, 1976, 1983; Lourenço, 1984.

Figure 6. *Centruroides barbudensis* (Pocock, 1898) adult female *in situ*, Prikeley Pear Cays, Anguilla. Photo credit: Karl Questel.

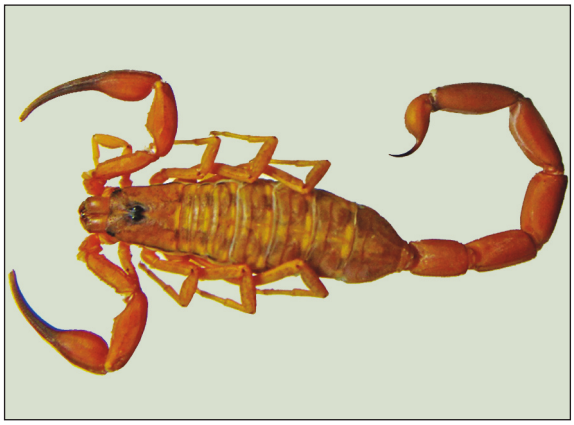

Figure 7. *Centruroides griseus* (C. L. Koch, 1844) adult female from The Fountain, Anegada Island, British Virgin Islands, preserved habitus. Photo credit: Luis F. de Armas.

British Virgin Islands

Anegada (18°44’N, 64°200W.): *Centruroides griseus* (C.L. Koch, 1844) [IND].

Eustatia (18°30’41.5” N, 64°21’22.5 W): *C. griseus*, *Heteronebo yntemai* Francke et Sissom 1980 [IND] and *Microtityus eustatia* Armas, 2018 [END].

Fallen Jerusalem Cay (15°25’00”N, 64’27’05”W): *C. griseus* [IND].

Great Camanoe (18.467196° N, 64.522689° W): *C. griseus* [IND], *H. yntemai* [IND] and *M. eustatia* [END].

Green Cay (18°27’13”N, 64°42’31”W): *C. griseus* [IND].

Guana (18°28030”N, 64°34’15”W): *C. griseus* [IND] and *Microtityus* sp. (*waeringi*?) [unknown].

Jost Van Dyke (18°27’00”N, 64°44’00”W): *C. griseus* [IND] and *H. yntemai* [IND].

Mosquito (18°30’38”N, 64°23’38”W): *C. griseus* [IND] and *H. yntemai* [IND].

Necker (18°31’38”N, 64°21’29”W): *C. griseus* [IND] and *Microtityus* sp. (*waeringi*?) [unknown].

Norman (18°19’N, 64°37’W): *C. griseus* [IND].

Peter (18°21’N, 64°16’W): *C. griséus* [IND] and *H. yntemai* [IND].

Virgin Gorda (18°28′54.8″ N, 64°23′20.95″ W): *C. griseus* [IND] and *M. eustatia* [END].

Remarks. *Centruroides griseus* is recorded from four localities on Anegada: (1) The Fountain, north of the settlement (Fig. 7); (2) near the airfield; (3) Sea Cow Bay (4.9 m a.s.l.); and (4) Windlass Bight but is probably found all over these islands

Figures 8, 9. *Microtityus eustatia* Armas, 2018 adult male (Fig. 8) and adult female (Fig. 10), preserved habitus. Photo credit: Luis F. de Armas.

Figure 10. *Heteronebo yntemai* Francke et Sissom 1980 adult female, preserved habitus. Photo credit: Luis F. de Armas.

where there is suitable habitat. It is recorded from Sabana Bay on Virgin Gorda, Cam Bay on Camanoe, Northside Bay on Jost Van Dyk. This species is found island-wide on Peter, Guana, Mosquito, Necker, Fallen Jerusalem Cay and Green Cay, showing it is distributed on almost all islets and cays of the British Virgin Islands. *Microtityus eustatia* Armas, 2018 (Figs 8–9) is found on Trail to Hidden Beach (type locality) on Eustatia Island (18°30'41.5" N, 64°21'22.5 W); Biras Hill (18°30'36"N, 64°21'21.5994W, 93 m a.s.l.) on Virgin Gorda; Cam Bay on Great Camanoe (18°28'13.8"N, 64°31'53.04"W; 3 m a.s.l.) [in sympatry with *C. griseus* and *H. yntemai*]; *Heteronebo yntemai* (Fig. 10) is the only scorpion species recorded thus far from the locality of Low Bay on Camanoe, although it is likely the other species on the island occur there. *Microtityus waeringi* was purportedly recorded from Guana Island by Valentine (2005: 240) and also from Necker Island by Lazell (2006: 43), but Armas (2018: 3, 8) regarded those records as possibly erroneous and in need of confirmation; they might actually correspond to the endemic BVI scorpion *M. eustatia* and require further study.

REFERENCES. Francke & Sissom, 1980; Valentine, 2005; Lazell, 2006; Armas, 2018.

Cayman Islands

Great Cayman (19°20'00"N, 81°13'00"W): *Centruroides gracilis* (Latreille, 1804) [INT], *Centruroides* cf. *anchorellus* Armas, 1976 [IND], *Isometrus maculatus* (De Geer, 1778) [INT], *Heteronebo caymanensis* Francke, 1978 [END].

Little Cayman (19°41'N, 80°03'W): *C. gracilis* [INT], *C.* cf. *anchorellus*. [IND]

Cayman Brac (19°43'12"N, 79°48'00"W): *H. caymanensis* [END], *I. maculatus* [INT].

REMARKS. Hounsome (1980: 85) erroneously recorded *Centruroides nitidus* (Thorell, 1876) from Cayman Islands; Armas (1982: 7) mentioned it as *Centruroides* sp., but Dupré & Armas (2021: 21) identified it as *C.* cf. *anchorellus*; the last record was based on some specimens examined by LFA in 1972 and previously returned to the Institute of Jamaica, Kingston (L. F. de Armas, unpublished). This species is illustrated here from a Cuban specimen (Fig. 11). *Heteronebo caymanensis* (Fig. 12) is endemic.

REFERENCES. Francke, 1978; Hounsome, 1980; Armas, 1988; Dupré & Armas, 2021.

Montserrat (16°45'N, 62°12'W): *C. barbudensis*

[IND], *Centruroides pococki* Sissom & Francke, 1983 [IND], *Oiclus* sp. [unknown, likely IND or END]

Remarks. Francke (1978: 35) recorded *Oiclus purvesii purvesii* (Becker, 1880) from Plymouth (16°42'19"N 62°12'48"W), 'Rocky Point', and 'south Montserrat', but this population is likely to be a different species. However, this cannot be ascertained for sure without direct research examining topotypic material. A recent sighting on iNaturalist (2023b) confirms the continued presence of this genus on-island. The identity of this taxon below the genus level requires formal taxonomic investigation. *Centruroides pococki* Sissom & Francke, 1983 (illustrated here from a specimen from Guadeloupe, Fig. 13) has previously been recorded from Rendezvous Bluff (16°48'10"N, 62°12'38"W).

References. Francke, 1978; Sissom & Francke, 1983; Armas, 2005; Dupré & Armas, 2021.

Turks & Caicos

Long Cay (21°28'00"N, 71°32'59.99"W): *Centruroides platnicki* Armas, 1981 [IND].

West Caicos (21°40'00"N, 72°27'30"W): *C. platnicki* [IND].

Unnamed cays 4 miles southwest of North Caicos (21°52'N, 72°05'W): *C. platnicki* [IND].

Salt Cay (21°19'30"N, 71°12'30"W), between Balfour Town and Northwest Point (21º20'35"N, 71º12'W): *C. platnicki* [IND].

Remarks. A single, indigenous, scorpion species was described from the UKOT of Turks & Caicos but has since also been reported elsewhere

Figure 11. *Centruroides anchorellus* Armas, 1976 adult male from Cuba. Photo credit: Michael Seiter. Figure 12. *Heteronebo caymanensis* Francke, 1978 adult female *in situ*, Cayman Brac, Cayman Islands. Photo credit: Matt Southgate. Figure 13. *Centruroides pococki* Sissom et Francke, 1983 adult female from Guadeloupe. Photo credit: Karl Questel. Figure 14. *Centruroides platnicki* Armas, 1981 adult female from Hispaniola. Photo credit: Michael Seiter.

in the Caribbean from Hispaniola (Fig. 14; also see Teruel & Seiter, 2016).

REFERENCES. Armas, 1981, 2001.

Medical importance of the scorpions from UKOTs

The most dangerous scorpions are among the family Buthidae, whereas the venom of the diplocentrids is almost harmless to humans (Simard & Watt, 1990). In the New World, the most venomous scorpions belong to the genera *Centruroides* and *Tityus* C.L. Koch, 1836 (Simard & Watt, 1990), but the last is absent from the UKOTs, where most envenomations by scorpions are not life-threatening (but can induce some symptoms of neurotoxicity) and mainly caused by *Centruroides barbudensis, C. gracilis, C. griseus* and *C. pococki* (Borges, 2013; Schmitt et al., 2017; Caré et al., 2021). We are unaware of any deaths being reported from *Centruroides* stings in the UKOTs, but occasional rare deaths have been reported, mainly in children and the frail, from elsewhere.

Envenomation caused by *I. maculatus* is mild. Recently, whilst on a scientific expedition to Saint Helena, several Saint Helenians recalled to DS they had been stung by *I. maculatus* – usually many decades ago whilst children, catching the scorpions in houses and gardens – but that the effects were minor. Reports of stings of *Buthus ibericus* sensu stricto from the Iberian Peninsula (e.g. Valdoleiros et al., 2021) indicate that its sting is not life threatening to healthy adults, this can likely be applied also to *B*. cf. *ibericus* although this requires further study. Similarly, *H. hottentotta* appears only to produce non-life threatening symptoms in healthy adults (Clinical Toxinology Resources, 2023).

Future directions of scorpiology in the UKOTs

We have discussed most of the previously available data above. However, it is clear that significant knowledge gaps still exist in the study of scorpions on UKOTs. As noted above, many aspects of the ecology and taxonomy of scorpions on some UKOTs indicate that future research is required. For those islands where the taxonomic identity of the scorpions must still be established (e.g. *Microtityus* sp. (*waeringi*?) in the British Virgin Islands and *Oiclus* sp. on Montserrat, see below) it will be necessary to collect voucher specimens for deposition in a natural history museum collection so that these specimens can be assessed taxonomically and described formally if novel.

Fieldwork to assess the range extent, habitat preferences, and ecology of known scorpions on the Caribbean UKOTs could be useful to predict the ranges of endemic and non-endemic species alike. The diet of most endemic and indigenous species is still poorly known and could also be improved through funded fieldwork. On the South Atlantic island of Saint Helena, fieldwork to further investigate the distribution of the single introduced scorpion *I. maculatus* could inform us of the potential impact that this species has on the endemic invertebrates. Finally, a holistic understanding of the ecology and natural history of Caribbean scorpions that already exist on other UKOTs could help territories such as Bermuda, which has already intercepted a single scorpion, to continue capacity to predict and intercept potential stowaway scorpions from establishing on the island.

The introduced species *I. maculatus* is widely distributed on the majority of UKOTs (Fig. 15) which host scorpions, indicating its adaptability to multiple habitats and, thus, it is not restricted to specific habitat. The same can be said for *H. hottentotta*, whilst only known from a single UKOT, it has been recorded from several other countries outside of its natural range (e.g. Teruel & Turiel, 2021). Most scorpions in the Caribbean UKOTs are indigenous, with the exception of *C. gracilis*, introduced on the Cayman Islands, and the invasive *I. maculatus* found on most of the islands (see above). Two species are endemic to a given UKOT but occur on most of their respective encompassed islands (*H. caymanensis* and *M. eustatia*) and seem to have particular habitat preferences.

Examination of the ecoregions of the Caribbean UKOTs shows multiple habitat types where scorpions have not been recorded in the scientific literature. These could represent areas for the discovery of new species or prior-described species which are not yet formally recorded on the island. At present, the *Oiclus* species was previously identified to subspecies level, but this requires urgent review as we do not believe it is conspecific and instead represents a misidentification.

At present, none of the indigenous and endemic scorpions in the Caribbean UKOTs have been as-

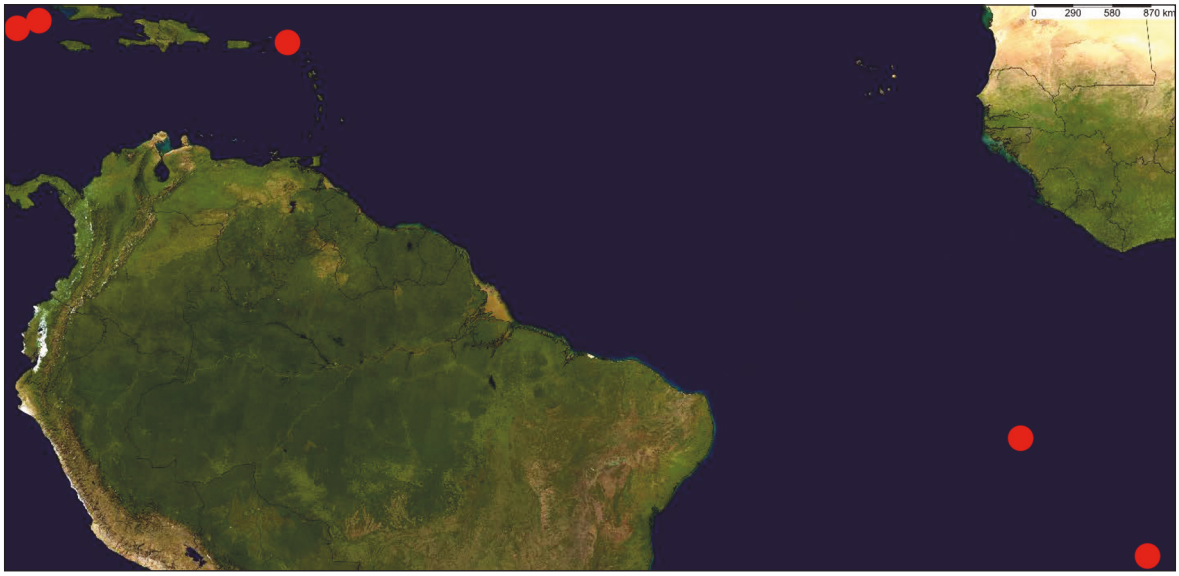

Figure 15. Map showing the four UKOT islands where *Isometrus maculatus* (DeGeer, 1778) is known to have established. In order, from left to right: Cayman Islands, Anguilla, Ascension Island, Saint Helena.

sessed by the IUCN Red List. Given the clear presence of introduced species on many of these islands, we consider it necessary that all indigenous and endemic scorpions be assessed as this may be one of several factors placing pressure on these species, particularly on smaller island ecosystems. This also emphasises the need for scorpions of uncertain identity (e.g. *B*. cf. *ibericus* from Gibraltar, *C*. cf. *anchorellus* from the Cayman Islands and *Oiclus* sp. from Montserrat) to be studied so that they can be assessed accurately in future conservation assessments. This requires restudy of previously collected specimens (if they exist) by a taxonomist, and, where required, fieldwork to collect new voucher material. The added benefit of the latter is that it provides additional opportunities for the sequencing of genetic data from scorpions from the UKOTs, providing there is adequate funding available to facilitate all of the above.

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Appendix 1

Scorpion specimens from Saint Helena and Ascension Island examined for this study. Abbreviations: ASC = Ascension Island Government Conservation and Fisheries Directorate invertebrate collection, Georgetown, Ascension Island [currently intended to later be transferred to SHNT]; BMNH = Natural History Museum, London, United Kingdom; imm. = immature; leg. = legit; SHNT = Saint Helena National Trust, Jamestown, Saint Helena. Museum numbers given where assigned.

Hottentotta hottentotta: UKOTs • 1 ♀, Ascension Island, -7.927149, -14.41475, 15 m, 4 Feb. 2022, leg. A. Sharp (ASC B15 2 PFM); 1 ♀, Georgetown, Ascension Island, NA, 2023, leg. A. Sharp (ASC).

Isometrus maculatus: UKOTs • 1 ♂, Travellers Hill, Ascension Island, -7.943, -14.372, 5 Dec.

2015, collected by member of the public (ASC TH TOWN OPP1); 1 ♀, same data as preceding, in separate tube (ASC TH TOWN OPP1); 1 imm. ♂ , Traveller's Site, Ascension Island, NA; 30 Dec. 2015, leg. M. Newton (ASC); 1 ♀, Ascension Island, NA (ASC); 1 imm., Ascension Island, 1958, leg. E. A. Duffey, tube 102 (BMNH); 1 imm. (BMNH), same data except tube 32; 1 imm. (BMNH), same data except tube 28; 1 imm. (BMNH), same data except tube 136; 1 imm. (BMNH), same data except tube 138; 2 imm. (BMNH), same data except tube 7080; 3 ♀♀ (BMNH), same data except tube 7036; 1 ♀, 15 imm. [scorplings], Jamestown, Saint Helena, May 1959, leg. Colonel F. Gilpin, in town premises, presented by C. R. Wallace, 'St. Helena CIE 17111', tube 461 (BMNH); 1 ♂, Saint Helena, NA, NA, leg. E.N. Mennell (BMNH 1932.9.29.1–2); 1 ♀, Sugarloaf Ridge, Saint Helena, ca. 1000ft, 17 May 1961, leg. A. Loveridge (BMNH); 1 ♂, found in dive-boot, The Wharf, Jamestown, St Helena, 11 Dec. 2015, leg. R. Towers (SHNT); 1 imm., Sandy Bay, Saint Helena, TH0929, 22 Apr. 2011, leg. R.S. Key and R.J.D. Key (SHNT); 1 imm., Teutonic Hall, Saint Helena, 4 Nov. 2022, found in woodpile by local boy, leg. R.S. Key (SHNT); 1 imm. ♀, Saint Helena, NA, NA (SHNT); 1 imm., Broad Gut, Saint Helena, 25–26 Feb. 1995, leg. P. Ashmole and M. Ashmole, tube SH542 (SHNT); 1 imm., Horse Point Plain, Saint Helena, 2 Jan. 1995, leg. P. Ashmole and M. Ashmole, tube SH037 (SHNT).