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## Records of ants (Hymenoptera: Formicidae) from the Republic of Benin, with particular reference to the mango farm ecosystem

BRIAN TAYLOR<sup>1\*</sup>, NORBERT AGOINON<sup>2</sup>, ANTONIO SINZOGAN<sup>3</sup>, APPOLINAIRE ADANDONON<sup>4</sup>, YOMMA N'DA KOUAGOU<sup>3</sup>, SALIOU BELLO<sup>3</sup>, ROSINE WARGUI<sup>3</sup>, FLORENCE ANATO<sup>3</sup>, ISSA OUAGOUSSOUNON<sup>3</sup>, HERMANCE HOUNGBO<sup>3</sup>, SÉVERIN TCHIBOZO<sup>5</sup>, RAYMOND TODJIHOUNDE<sup>3</sup> & JEAN-FRANÇOIS VAYSSIÈRES<sup>6</sup>

<sup>1</sup>*I1 Grazingfield, Wilford, Nottingham, NG11 7FN, U.K.;*

<sup>2</sup>*Université d'Abomey Calavi, Cotonou, Rép. du Bénin;*

<sup>3</sup>*Université d'Abomey Calavi, FSA, Cotonou, Rép. du Bénin;*

<sup>4</sup>*Université d'Agriculture de Kétou, Kétou, Rép. du Bénin;*

<sup>5</sup>*CRGB, Cotonou, Rép. du Bénin;*

<sup>6</sup>*CIRAD Persyst, UPR HortSys, 34398, Montpellier, HortSys, Univ Montpellier, CIRAD, Montpellier, France*

\*corresponding author: [dr.brian.taylor@ntlworld.com](mailto:dr.brian.taylor@ntlworld.com)

### Abstract

The historic records of ants from Benin enumerate only 22 species. Our collections, with a primary focus on the mango farm ecosystem, *Mangifera indica*, have brought this total to 133 species of which only six were recorded before. The Benin specimens for all but six species have been checked against type images on Antweb.org. Twenty species have been recognised as distinct and raised to species status, with explanatory notes. Four species appear to be new but will be described elsewhere.

**Key words:** Ants, Formicidae, Benin, *Mangifera indica*

### Introduction

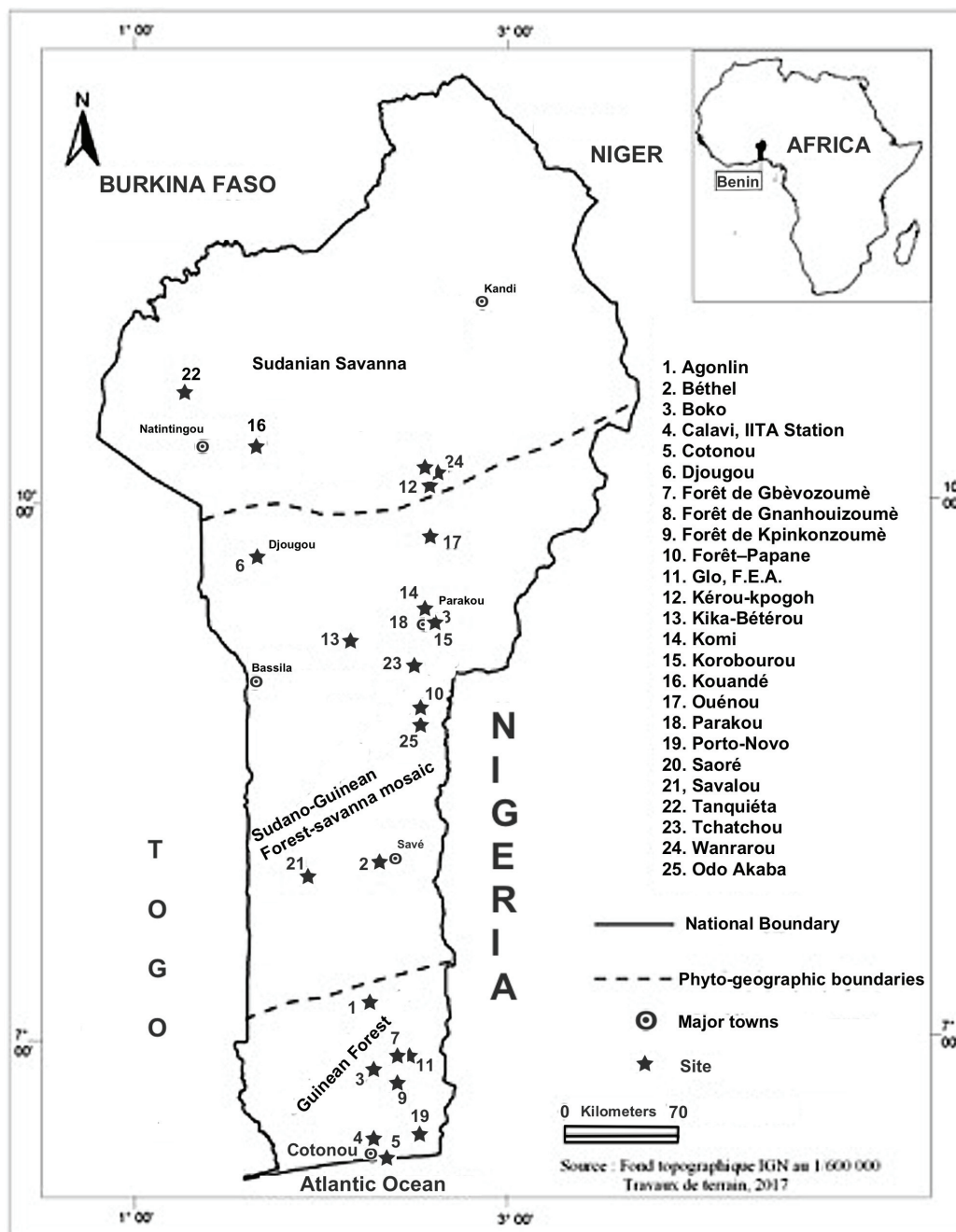
The work detailed in this paper stems from the study of the weaver ant, *Oecophylla longinoda* (L.) as it affects the mango farm ecosystem, *Mangifera indica* L., in Benin (Van Mele *et al.* 2007; and Vayssières *et al.* 2011). The research was part of West African Fruit Fly Initiative (WAFFI), examining the role of *O. longinoda* as a key element of conservative biological control activities within the IPM-package against mango fruit flies being promoted to West African growers. The prior knowledge of the ant fauna of the Republic of Benin is remarkably poor compared with the other countries of sub-Saharan Africa, with only 22 species listed in the published records (see below).

### Material and Methods

Our literature review is based on historical taxonomy papers as well as other ant-related papers. A large part of this literature review, as well as additional data, was available from the first author's web site on the ants of Africa (<http://www.antsafrica.org/>). The web site includes an almost complete illustrated catalogue of all the named species, with subspecies, varieties and other subspecific forms (Taylor 2018). The site is funded until 2026 and is permanently archived by the British Library web archive. The on-line format allows for rapid updating, meaning the site embodies the latest in taxonomic changes, or commentary on those changes.

All new records are from collections by Séverin TCHIBOZO or the team headed by Jean-François VAYSSIÈRES (RVA numbers). The former are all from forests, whereas most of the latter are from mango farms.

Unless stated all specimens were collected by hand sampling. The locations, see Fig. 1, are denoted in bold and are as follows:



**Figure 1.** Map of Benin with 25 sites among three agroecological zones.

S. Tchibozo collections

Bonou, Forêt de Gnanhouizoumè, 06°50-55' N 02°20-30' E

Forêt de Gbèvozoumè, 06°55'32.8" N 02°29'13"

Forêt de Kpinkonzoumè, 06°46'10.8" N 02°27'49" E

J.-F. Vayssières collections

Agonlin, 07°12'55.2" N 02°19'13.7" E, 55 m asl

Béthel, 8°00'13" N 02°22'57" E

Boko, 09°22'21" N 02°40'13" E

Borgou, 10°10'44" N 02°43'14" E (small farm, so not on map)

Calavi, IITA Station, 06°25'17" N 02°19'42" E

Forêt-Papane, 8°49'39" N 02°36'31" E

Glo, F.E.A., 06°55'05" N 02°32'06" E

Kérou-kpogoh, 10°06'37" N 02°38'46" E

Kika-Bétérou, 09°14'07" N 02°11'52" E  
Komi, 09°25'47" N 02°37'30" E  
Korobourou, 09°22'21" N 02°40'13" E  
Korobourou, 09°22'13" N 02°40'16" E  
Odo Akaba, , 8°46'27" N 02°36'6" E  
Ouénou, 9°49'26" N 02°39'49" E  
Parakou, 9°20'47" N 02°38'31" E  
Saoré, 10°11'35" N 02°38'03" E  
Tanguiéta, 10°40'05" N 01°18'14" E, 234 m asl  
Tchatchou, 09°05'57.3" N 02°34'27.4" E  
Wanrarou, 10°10'44" N 02°43'14" E

Ants were placed in plastic vials filled with 80° ethanol. The specimens were examined and identified by the first author and can be viewed on his website via links from the species pages to a “virtual museum”, with folders of digital images taken as part of the identification process. The original specimens as mounted and identified by Brian Taylor are held by him and will be deposited in the Oxford University Museum of Natural History.

In the text that follows, with the exception of six species, in examining historic and new records, the reference number of type specimens imaged by the Antweb project of the California Academy of Sciences is given, as, e.g., CASENT0902685, FOCOL1234, etc. These can be accessed by entering, for example, <https://www.antweb.org/specimenImages.do?code=CASENT0904019> into the address bar box of any web browser, changing the component after the = sign as appropriate. That should open the page for the type (sometimes co-type, syntype, etc.). It should be noted that the standard three Antweb images (lateral, dorsal and full face view) do not always reveal essential diagnostic characters, e.g. scape length, and almost all the images appear to have a misleading magenta tint.

Where applicable, comparison is made with the works of Taylor (1976, 1977, 1978, 1979, 1980a, 1980b) and Taylor & Adedoyin, 1978 (see references below) to facilitate understanding of the overall ant populations in the neighbouring Benin and Western Nigeria ecosystems, with, for example, Korobourou in Benin being only some 250 km north-west of the Cocoa Research Institute of Nigeria, near Ibadan. The publications from Nigeria additionally reviewed studies elsewhere in West Africa on ant populations, so, as very little in the way of such studies has been done in the succeeding years, can be consulted as comprehensive summaries of the ant ecology in tree crops, primarily cocoa.

## Results

### Taxonomic revisions

The availability of type images coupled with the fresh specimens reported below and from other African countries have led the senior author to propose raising the following species from the status of subspecies, variety, etc. Details are in the main body of the text relating to the individual species but all are members of genera without any modern or useful historic reviews.

*Aenictus guineensis* Santschi, 1924: 204, stat. nov.  
*Camponotus (Tanaemyrmex) chilon* Emery, 1925: 100, stat. nov.  
*Camponotus (Tanaemyrmex) lohieri* Emery, 1915b: 22 (Santschi 1913: 313), stat. nov.  
*Camponotus (Myrmosericus) controversus* Santschi, 1916: 509, stat. nov.  
*Camponotus (Tanaemyrmex) proletaria* Baroni Urbani, 1971: 362, stat. nov.  
*Crematogaster (Crematogaster) occidentalis* Mayr, 1902: 293, stat. nov.  
*Crematogaster (Crematogaster) zumpti* Santschi, 1937: 99, stat. nov.  
*Crematogaster (Decacrema) costeboriensis* Santschi, 1919: 86, stat. nov.  
*Dorylus (Typhlopone) oraniensis* Lucas, 1849: 302, stat. rev.  
*Lepisiota guineensis* (Mayr, 1902: 296), stat. nov.  
*Lepisiota laevis* (Santschi, 1913: 312) stat. rev.  
*Lepisiota validiuscula* (Emery, 1897: 602), stat. nov.  
*Myrmicaria occidentalis* Santschi, 1920b: 3, stat. rev.

*Pheidole ascara* Emery, 1901: 62, stat. nov.  
*Pheidole bayeri* Forel, 1916: 413, stat. nov.  
*Pheidole costauriensis* Santschi, 1914a: 433, stat. nov.  
*Pheidole fulvobasalis* Santschi, 1921: 116, stat. nov.  
*Pheidole impressifrons* Wasmann, 1905: 110, stat. nov.  
*Pheidole melancholica* Santschi, 1912: 164, stat. nov.  
*Pheidole neutralis* Santschi, 1914a: 336, stat. nov.  
*Pheidole pullata* Santschi, 1914a: 136, stat. nov.  
*Pheidole senilifrons* Wheeler, 1922: 130, stat. nov.  
*Pheidole welgelegenensis* Forel, 1913: 327, stat. nov.

#### Historic Records

Definitive species names, as recognised here, are given in bold font and collectors names are given in CAPITALS.

Forel (1901): *Camponotus maculatus* F. r. *solon* Forel v. *Chilon* n. var., no locality, MARTIENSEN, a queen but not associated with any workers. New status here as ***Camponotus (Tanaemyrmex) chilon*** Emery, 1925: 100 (listed as *Camponotus solon* Forel, var. *chilon*), type CASENT0910267. Note: *chilon* was the Forel spelling. Santschi (1937) had it as “*solon* v. *chilon*”, which is the spelling on the CASENT0910267 label.

Santschi (1913): ***Messor regalis*** (Emery, 1892, as *Cratomyrmex regalis*, queen only), Dahomey-Moyen, Aguagua (Agouagou). ROUBAUD and junior synonym *Messor regalis* var. *rubea* n. nov. Bas Dahomey, Le MOULT (synonymy by Bolton, 1982), type CASENT0913212; ***Carebara sicheli*** Mayr, queen only described, type CASENT09119628, “Haut-Dahomey”, ROUBAUD.

Santschi (1914): ***Atopomyrmex mocquersyi*** André, 1889, type CASENT0101460, Cotonou, 6°20'N 2°25'E, Prof F SILVESTRI; ***Cataulacus guineensis*** F. Smith, 1853, type CASENT0901968, Cotonou, 6°20'N 2°25'E, Prof F SILVESTRI.

Santschi (1915): ***Sphinctomyrmex rufiventris*** n. sp., (now *Zasphinctus rufiventris* following Borowiec, 2016), Haut-Dahomey, Djougou, Kouandé, DESANTI, also Kika, Lt RIBOT, male only known, CASENT0911272. ***Aenictus humeralis*** Santschi var. ***viridans*** n. var. Haut-Dahomey, Djougou, Kouandé, DESANTI, male only, CASENT0911430. ***Creumatogaster pronotalis*** Santschi var. ***behanzini*** n. var., Cotonou, GERMAIN, x.1897, CASENT0904481, status uncertain, may be a form of *Creumatogaster kneri* Mayr, 1862. ***Creumatogaster occidentalis*** Mayr, 1902, CASENT0919672, new status (here) as *Creumatogaster menilekii* For. stirps *occidentalis* Mayr), Kouandé, DESANTI. ***Creumatogaster wernerii*** Mayr, 1907, CASENT0919679 (as var *pasitheia* n. var., synonymized here, CASENT0912729) Bas-Dahomey, DESANTI, 1913. ***Creumatogaster (Decacrema) edentula*** n. sp., CASENT0193954, Kouandé, DESANTI. ***Trichomyrmex abyssinicus*** (Forel, 1894, as *Monomorium abyssinicus*, CASENT0249905, media worker), Dahomey, DESANTI. ***Camponotus lohieri*** Santschi, 1913, new status (here, originally described as *Camponotus (Myrmoturba) maculatus* Fab. stirps *melanocnemis* Sants. v. *lohieri* n. var. Santschi, 1913; raised status to *Camponotus maculatus* F., var. *lohieri* Sant., Emery, 1915g: 22), CASENT0905268), Haut-Dahomey, DESANTI. ***Camponotus desantii*** (originally named as *Camponotus (Myrmoturba) maculatus* F. stirps *desantii* n. st., raised to species by Baroni Urbani, 1972), major worker CASENT0903520, minor worker, CASENT0911936, Kouandé, DESANTI.

Santschi (1916): ***Cataulacus difficilis*** (as *Cataulacus pygmaeus* André stirps *difficilis* n. stirps, CASENT0912546, no location (probably Kouandé), DESANTI, raised to species by Bolton (1974a).

Santschi (1920a): ***Aenictus mutatus*** Santschi, 1913, CASENT0911435 (raised to species by Santschi 1920d), Kouandé, DESANTI.

Santschi (1920b): ***Camponotus maculatus*** var. ***flavominor***, status in Emery (1925c), as *Camponotus (Myrmoturba) maculatus* F. st. *melanocnemis* Sants. v. *flavominor* n. v., CASENT0911980, Haut-Dahomey, Kouandé, DESANTI.

Santschi (1921): ***Hypoponera punctatissima*** (Roger, 1859, synonymy by Bolton & Fisher, 2011), as *Ponera brevis* n. sp., CASENT0915187, Porto Novo, Le MOULT. ***Pheidole fulvobasalis*** Santschi, 1921, new status (here) as *Pheidole excellens* Mayr v. *fulvobasalis* nov. var., CASENT0913306, Agouago, ROUBAUD.

Santschi (1924): *Aenictus mutatus*, Bas-Dahomey, Dr DUCORPS (see above).

Santschi (1926): ***Camponotus aegyptiacus*** Emery, 1915f, type major worker CASENT0905264, minor worker CASENT0905265 (as *Camponotus maculatus* Fab. st. *infrasquamis* n. stirps, CASENT0911892; synonymy by Baroni Urbani, 1972), Kouandé, DESANTI. ***Camponotus vestitus*** Sm. v. ***perpectitus***, n. var. queen, CASENT0911786, Kouandé, DESANTI; note: the type queen of “*Camponotus vestitus*”, F. Smith, 1858, as shown as CASENT0903234, is not a *Camponotus* but an *Anoplolepis*. *Camponotus sericeus* (Fabricius, 1798), no type images, Kouandé, DESANTI; Casamance, CLAVEAU.

Santschi (1930): *Sphinctomyrmex rufiventris* Santschi, 1915, see above (as *Aethiopone rufiventris* Sants., genus synonymy by Bolton, 1973a) Djougou and Kouandé, DESANTI. *Paltothyreus tarsatus* F. v. *striatus* n. var., CASENT0915279, Savalou, M CHAMBON, note: there are no type images of *Paltothyreus tarsatus*.

Notes on the collectors: The single most prolific collector was Henri Desanti who, rose to become governor of the French colony of Dahomey in West Africa. He authored a book, *Du Danhomé au Bénin-Niger*, published by Larose, Paris, 1945. Claveau (or Claveauz) appears to have been based in Senegal as he collected many specimens from there which were identified by Santschi. Although his name appears on the labels, it appears Eugène Le Moults (1882-1967) was a naturalist specialising in entomology, particularly butterflies, and was French Guyana's only butterfly exporter from 1903 to 1920. He moved to Paris in 1908 creating the largest entomological traders in the world. On a wider scale, perhaps the most outstanding collector was Professor Filippo Silvestri, whose 1913 "voyage" to west and south Africa yielded many new species. The species were described by the very prolific taxonomist Felix Santschi (1872-1940).

List of the 117 species reported from the present collections from Benin

*Aenictus decolor* (Mayr, 1879) (Formicidae: Aenictinae). Type worker CASENT0901639; type location East Africa; junior synonyms *Aenictus batesi* Forel, 1911, from Nigeria, CASENT0907024, and *Aenictus bidentatus* Donisthorpe, 1942, from Ghana, CASENT0902685. Additional prior records from Gabon (Gotwald, 1976, as *A. bidentatus*), Ivory Coast (Gotwald & Leroux, 1980) and Nigeria (Taylor, 1980, as *Aenictus* sp. 2). New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2915, 22.ix.2012; *M. indica* orchard, Quadrat 2, tube 1, variété: Kent, ground nesting; n= 2.

*Aenictus guineensis* Santschi, 1924 (Formicidae: Aenictinae). Type worker CASENT0911438, as *Aenictus rotundatus* Mayr stirps *guineensis* n.st., Santschi, 1924; type location Guinea. Additional prior record from Nigeria (Taylor, 1980, as *Aenictus* sp. 1). This species is some 75-80% of the size of the Eastern Africa species *A. rotundatus* and has a notably more rectangular head and a flatter profile to the petiole among other differences. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3015, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, n = 2.

*Anochetus bequaerti* Forel, 1913 (Formicidae: Ponerinae). Type worker RMCAENT000017738; type location DR Congo. Widespread pan-African. New records from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouzoumè, Benin 6, 27.viii.2006, Pitfall trap, n=1; J.-F. VAYSSIÈRES, Korobourou, RVA 2945, 7.x.2012, *M. indica* orchard, Quadrat 1, tube 6, variété: Kent, ground nesting, n=2.

*Atopomyrmex mocquerysi* André, 1889 (Formicidae: Myrmicinae). Type worker CASENT0101460; type location Senegal. Widespread pan-African. Prior record from Benin: Santschi (1914), Cotonou, F Silvestri. New record from Benin: J.-F. VAYSSIÈRES, Calavi, RVA 2879, 31.x.2012, on *M. indica*, n=4.

*Bothroponera soror* Emery 1899 (Formicidae: Ponerinae). Type worker RMCAENT000017726; type location Cameroun. Widespread pan-African. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3099.10, 9.xi.2011, running on the ground, n=4.

*Brachyponera sennaarensis* (Mayr, 1862) (Formicidae: Ponerinae). Type worker CASENT0902474; type location Sudan. Widespread pan-African and into southwest Asia. New records from Benin: J.-F. VAYSSIÈRES, Parakou, RVA 2983, 7.xi.2012, under mango tree on the ground, n=2; Béthel, RVA 3001, 5.xi.2012, running on ground, n=2; Korobourou, RVA 3006, 6.xi.2012, n=1; Kika-Bétérou, RVA 3099.4, 9.xi.2011, running on the ground, n=1.

*Camponotus (Myrmopelta) vividus* (F Smith, 1858) (Formicidae: Formicinae). Type worker CASENT0903485; type location Sierra Leone. Widespread arboreal in African forest zones. New records from Benin: S. TCHIBOZO, Forêt de Gnanhouzoumè, 29.i.2007, forêt fourmis (forest ants), n=2; J.-F. VAYSSIÈRES, Calavi, RVA 2686.1, 1.iv.2011, *M. indica* orchard, n=1.

*Camponotus (Myrmosaga) schoutedeni* Forel, 1911 (Formicidae: Formicinae). Type worker CASENT0910442; type location DR Congo; uncommon across central African forest zone. New records from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouzoumè, Benin 5, 27.viii.2006, pitfall trap, n=1; J.-F. VAYSSIÈRES, Komi, RVA 2882.2, 24.v.2012, with Tettigometridae on fruit of *Annona muricata*, n=1; Korobourou, RVA 2955.1, 7.xi.2012, northern zone of mango plantation (Eucalyptus) beating weeds, minor workers, n=2; RVA 3089.3, 27.xii.2012, *Anacardium occidentale*, hand collected, minor worker, n=1; RVA 3090.2, 29.xii.2012, *Anacardium occidentale*, hand collected, minor worker, n=2; Béthel, RVA 3004.2, 5.xi.2012, on Poaceae, minor worker, n=1; Kérou-kpogoh, RVA 3009.2, 2.vi.2011, on *Annona senegalensis* associated with coccids, n=1.

*Camponotus (Myrmosericus) controversus* Santschi, 1916 (Formicidae: Formicinae). Type worker CASENT0911775, as *Camponotus (Myrmosericus) rufoglaucus* Jerd. stirps *controversus*, nov. nom., by Santschi, 1916; type location Tanzania (southwestern). Recorded also from DRC Congo (Santschi 1916). Known also from

Senegal and Gambia (Taylor 2017). New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2889, 19.x.2012, *M. indica* orchard, Quadrat 6, tube 4, variété: Gouverneur; on ground, fast-running; minor worker, n=1; RVA 3010, 10.xi.2012, Serie 3, ground nesting, minor worker, n=1; Korobourou, RVA 2958, 7.xi.2012, northern zone of mango plantation (Eucalyptus), beating weeds, minor worker, n=1; Boko, RVA 2994, 6.xi.2012, fast running on ground; ground nesting, minor workers, n=2; Kika-Bétérou, RVA 3097.1, 9.xi.2011, on weeds, minor worker, n=1; RVA 3098.4, 9.xi.2011, on *Terminalia laxiflora*, minor worker, n=2; RVA 3099.9, 9.xi.2011, running on the ground, minor worker, n=2.

*Camponotus (Myrmosericus) flavomarginatus* Mayr, 1862 (Formicidae: Formicinae). Type worker CASENT0915599; type location Ghana. Widespread across African grassland-forest zone. Recorded and illustrated by Taylor (1978) from Nigeria, where it was fairly common especially on insolated ground, where it nests in the soil. It forages widely across the ground and on native herbaceous vegetation and trees; also on cocoa (fairly common), cashew, coffee, kola and oil palm. It will tend aphids on cocoa but probably does not build tents. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2681, 7.i.2011, *M. indica* orchard, on the ground and on the tree, n=2; RVA 2683, 28.i.2011, *M. indica* orchard on the ground and on the tree, observed antagonist of *O. longinoda*, n=1; RVA 2684, 28.i.2011, *M. indica* orchard on the ground, observed antagonist of *O. longinoda*, n=1; RVA 2685, 28.i.2011, *M. indica* orchard, on the ground, observed antagonist of *O. longinoda*, n=1; RVA 2916.2, 13.ix.2012, *M. indica* orchard, Quadrat 3, tube 4, variété: Ifac, ground nesting; minor worker, n=1; Korobourou, RVA 2955.2, 7.xi.2012, northern zone of mango plantation (Eucalyptus) beating weeds, minor workers, n=1; RVA 2976.2, 7.xi.2012, on ground at base of *Eucalyptus* (b), minor worker, n=1; RVA 3008, 6.xi.2012, from beating weeds near river, minor worker, n=1; RVA 3060.2, 27.iii.2013, *M. indica* orchard, prey of *O. longinoda*, 1300-1400 h, minor worker, n=1; RVA 3089.2, 27.xii.2012, on *Anacardium occidentale*, hand collected, minor workers, n=2; Agonlin, RVA 3108.2, 4.ii.2013, 55 m asl, on ground, minor worker, n=1.

*Camponotus (Myrmotrema) carbo* Emery, 1877 (Formicidae: Formicinae). Type minor worker CASENT0905432; type location Eritrea. Junior synonym *occidentalis* Forel 1902, cotype minor worker CASENT0190467, identical to type form minor, major worker CASENT0190466, from Ghana. Reported as a savannah species by Lévieux & Louis (1975). New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2887, 18.x.2012, on *M. indica*, Quadrat 6, tube 1, variété: Ifac, arboreal, n=2; Korobourou, RVA 2979, 7.xi.2012, running on ground, major worker, n=1; RVA 2962, 8.xi.2012, at base of *Anacardium occidentale*, To 15, ground nesting, minor workers, n=3; RVA 2964, 8.xi.2012, *Anacardium occidentale*, To 15; arboreal nesting in hollow branch, observed antagonist of *O. longinoda*, n=3; RVA 2985, 7.xi.2012, on ground, minor worker, n=1; RVA 3063.1, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, major worker, n=1; RVA 3075.1, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, media worker, n=1; RVA 3089.1, 27.xii.2012, on *Anacardium occidentale*, hand collected, major & minor workers, n=2; Boko, RVA 2986, 6.xi.2012, foraging on *Entadde africana*, media workers, n=2; Tanguiéta, RVA 3092.1, 10.xi.2011, on *Acacia hockii*, beating, n=2; RVA 3093.2, 10.xi.2011, on *Acacia sieberiana*, beating, n=2.

*Camponotus (Myrmotrema) foraminosus* Forel, 1879 (Formicidae: Formicinae). No type images (see CASENT0910447, non-type); type location Senegal; widely distributed and apparently common across pan-African forests, arboreal. New records from Benin: S. TCHIBOZO, Forêt de Gnanhouzoumè, 29.i.2007, Forêt fourmis (forest ants), n=2; Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=3; J.-F. VAYSSIÈRES, Korobourou, RVA 3053.1, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1500-1600 h, minor worker, n=1.

*Camponotus (Myrmotrema) haereticus* Santschi, 1914 (Formicidae: Formicinae). Type worker CASENT0911838; type location Nigeria. Known also from Ghana (Santschi, 1914) and DR Congo (Wheeler, 1922). Recorded and illustrated by Taylor (1978) as "*Camponotus foraminosus dorsalis*". Found to be quite common in cocoa farms in Nigeria (Taylor, 1977 Taylor & Adedoyin 1978). New records from Benin: S. TCHIBOZO, Forêt de Gnanhouzoumè, 29.i.2007, forêt fourmis (forest ants), n=2; J.-F. VAYSSIÈRES, Korobourou, RVA 3056.4, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, major worker, n=1; RVA 3061.1, 27.iii.2013, *M. indica* orchard; observed prey of *O. longinoda*, 1400-1500 h, major worker, n=1; RVA 3082.1, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, media worker, n=1; RVA 3084.2, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1200-1300 h, media worker, n=1; RVA 3087.2, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, major & minor workers, n=2.

*Camponotus (Orthonotomyrmex) sericeus* (Fabricius, 1798) (Formicidae: Formicinae). No type images (subspecies *sulgeri* Santschi 1913, CASENT0911867) type location Senegal. Recorded from Benin by Santschi (1926b), Kouandé and Casamance. Widely distributed and quite common pan-African. New records from Benin: J.-F. VAYSSIÈRES,

Calavi, RVA 2875.3, 16.x.2012, on ground, IITA station, n=1; Korobourou, RVA 2880.1, 29.x.2009, on *M. indica*, in nest, minor worker, n=1; RVA 2990, 6.xi.2012, near river between yam crop and mango plantation, n=2; RVA 3007, 6.xi.2012, near river between yam crop and mango plantation, n=2; RVA 3089.4, 27.xii.2012, on *Anacardium occidentale*, hand collected, media worker, n=1; Korobourou, RVA 2916.1, 13.ix.2012, *M. indica* orchard, Quadrat 3, tube 4, variété: Ifac, ground nesting; minor workers, n=1; Parakou, RVA 2982, 7.xi.2012, under mango tree on the ground, n=2; Kika-Bétérou, RVA 3097.3, 9.xi.2011, on weeds, minor workers, n=2; RVA 3098.1, 9.xi.2011, on *Terminalia laxiflora*, major worker, n=1; RVA 3099.5, 9.xi.2011, running on the ground, minor worker, n=1; Agonlin, RVA 3108.1, 4.ii.2013, on ground, minor worker, n=1.

*Camponotus (Tanaemyrmex) acvapimensis* Mayr, 1862 (Formicidae: Formicinae). Type minor worker CASENT0249859; type location Ghana. Widely distributed and common across African forest zone. By origin probably a savannah species, it nests in insolated ground and is found throughout West Africa, extending eastwards right across tropical Africa. Found on cocoa farms with a broken canopy, as a dominant on about 4.5% of trees and 33/76 farms, in wetter areas, often associated with *Oecophylla longinoda* (Taylor 1977; Taylor & Adedoyin 1978). An avid tender of Homoptera, including aphids, stictococcids and pseudococcids, over which it often constructs roofs, or tents, of soil particles. Also found foraging on native trees and low vegetation, as well as on cashew, coffee, kola, oil palm and plantain. New records from Benin: S. TCHIBOZO, Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=4; J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2660, 26.iv.2012, *M. indica* orchard, nesting in branches, observed antagonist of *O. longinoda*, n=2; RVA 2664, 20.iv.2012, *M. indica* orchard, observed antagonist of *O. longinoda*, n=2; RVA 2670, 29.iii.2012, *M. indica* orchard, n=2; RVA 2707, 7.xii.2011, *M. indica* orchard, n=1; RVA 2883, 7.xii.2011, on *M. indica*, observed antagonist of *O. longinoda*, minor workers, n=2; Korobourou, RVA 2687, 17.viii.2011, *M. indica* orchard, on ground and tree, n=1; RVA 2688, 7.i.2011, *M. indica* orchard, on ground and tree, n=1; RVA 2689, 13.xii.2010, *M. indica* orchard, on ground and tree, n=2; RVA 2690, 13.xii.2010, *M. indica* orchard, on ground and tree, major & minor workers, n=2; RVA 2892, 19.x.2012, *M. indica* orchard, Quadrat 6, tube 1, variété Gouverneur, ground nesting, n=2; RVA 2893, 13.ix.2012, *M. indica* orchard, Quadrat 5, tube 1, variété Gouverneur, ground nesting, n=2; RVA 2920, 13.ix.2012, *M. indica* orchard, Quadrat 5, tube 5, variété: Gouverneur; ground nesting, minor workers, n=2; RVA 2931, 15.x.2012, *M. indica* orchard, Quadrat mixte 2-9, tube 1, ground nesting, minor workers, n=2; RVA 2944, 15.x.2012, *M. indica* orchard, Quadrat mixte 2-9, tube 3, major worker, n=1; RVA 2957, 13.ix.2012, *M. indica* orchard, Quadrat 5, tube 1, variété Gouveneur, ground nesting; major workers, n=1; Calavi, RVA 2876, 25.x.2012, IITA station, inside the station on ground, n=2; Komi, 09°25'47" N 02°37'30" E, RVA 2882.1, 24.v.2012, with Tettigometridae on fruit of *Annona muricata*, n=2; Ouénou, RVA 2951, 10.x.2012, on *Gardenia erubescens*, Quadrat 1, Zone 1, associate with coccids, minor worker, n=1; Korobourou, RVA 2953, 8.xi.2012, on *M. indica*, Ifac T2-8, soil tent on leaf, minor worker, n=1; RVA 2955.4, 7.xi.2012, northern zone of mango plantation (~Eucalyptus), beating weeds, minor workers, n=1; RVA 2966, 8.xi.2012, on *M. indica*, Ifac T2-8; ground nesting; very antagonistic to *O. longinoda*; major & minor worker, n=2; RVA 2968, 8.xi.2012, on *M. indica*, Ifac T2-8; ground nesting; very antagonistic to *O. longinoda*; minor workers, n=2; RVA 2971, 8.xi.2012, on *M. indica*, Ifac T2-8; associated with small coccids on leaves, minor workers, n=2; RVA 2975, 7.xi.2012, ground nesting at base of Eucalyptus (a), observed antagonist of *O. longinoda*; major worker, n=1; RVA 2976.1, 7.xi.2012, ground nesting at base of Eucalyptus (b), observed antagonist of *O. longinoda*; minor worker, n=1; RVA 2978, 7.xi.2012, ground nesting at base of Eucalyptus (b), observed antagonist of *O. longinoda*; minor worker, n=1; RVA 3057.1, 27.iii.2013, *M. indica* orchard, prey of *O. longinoda*, 1000-1100 h, minor worker, n=1; RVA 3090.1, 29.xii.2012, *Anacardium occidentale*, hand collected, major & minor workers, n=2; Boko, RVA 2987, 6.xi.2012, on weeds, ground nesting, n=2; RVA 2996, 6.xi.2012, on weeds, n=2; Borgou, RVA 2997, 27.ix.2012, on *Piliostigma thonningi* with membracids, minor workers, n=2; Forêt-Papane, RVA 2998, 22.xi.2011, on *Terminalia avicennoïdes*, Zone 3, quadrat 9, associated with Homoptera, n=2; Odo Akaba, RVA 2999, 2.xi.2011, on *Sarcocephalus latifolius*, Zone 1, Quadrat 9, associated with coccids & membracids, n=1; Saoré, RVA 3000, 5.x.2011, on *Strychnos spinosa*, Zone 2, Quadrat 2, associated with coccids, minor workers, n=1; RVA 3023, 5.x.2011, Zone 1, quadrat 2, associated with coccids, n=1; Kérou-kpogoh, RVA 3004.1, 5.xi.2012, on Poaceae, minor workers, n=2; RVA 3009.1, 2.vi.2011, on *Annona senegalensis*, associated with coccids, n=2; Wanrarou, RVA 3005, 27.ix.2011, on *Piliostigma thonningi*, associated with membracids, minor workers, n=1; RVA 3024, 27.ix.2011, Zone 2, quadrat 2, associated with coccids, minor workers, n=1; Kika-Bétérou, RVA 3096.2, 9.xi.2011, *Isoblerlinia doka*, beating, minor, n=1; RVA 3098.6, 9.xi.2011, on *Terminalia laxiflora*, major & minor, n=2; RVA 3099.8, 9.xi.2011, running on the ground, minor workers, n=2; RVA 3097.6, 9.xi.2011, on weeds, minor worker, n=1.

*Camponotus (Tanaemyrmex) guttatus* Emery, 1899 (Formicidae: Formicinae). Type worker CASENT0905280; type location Cameroun. Appears to be rare and primarily West African. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3086, 4.iv.2013, *M. indica* orchard, prey of *O. longinoda*, 1400-1500 h, minor, n=1.

*Camponotus (Tanaemyrmex) maculatus* (Fabricius 1782) (Formicidae: Formicinae). No type images; type location "West Africa". Well known, common and widely distributed throughout Africa. Reported from Benin by Santschi (1915, *C. maculatus lohieri*; 1920, *C. maculatus flavominor*), both from Kouandé, collector Desanti. Recorded and illustrated from Nigeria by Taylor (1978). A common ground ant in Nigeria, at CRIN on 2.5% of cocoa, which often ascends cocoa trees to tend aphids, but does not build tents (Taylor 1977). It was not among the commoner species in the 76-farm survey (Taylor & Adedoyin 1978). Further records from Benin: S. TCHIBOZO, Forêt de Gnanhouizoumè, Benin 14, 27.viii.2006, pitfall trap, n=2; 29.i.2007, forêt fourmis (forest ants), n=2; 28.ii.2007, Forêt de Gbèvozoumè, lisière fourmis (forest edge/ border ants), n=3; J.-F. VAYSSIÈRES, Korobourou, RVA 2896, 7.ix.2012, *M. indica* orchard, Quadrat 1, tube 4, variété: ?, ground nesting (nuit), minor worker, n=1; RVA 2905, 13.ix.2012, *M. indica* orchard, Quadrat 5, tube 7, Gouverneur, ground nesting, minor worker, n=1; RVA 2907, 7.ix.2012, *M. indica* orchard, Quadrat 1, tube 3, Kent, ground nesting, minor worker, n=1; RVA 2935, 13.ix.2012, *M. indica* orchard. Quadrat 3, tube 3, variété Ifac, ground nesting, minor worker, n=1; RVA 2941, 10.ix.2012, *M. indica* orchard, Quadrat 5, tube 3, variété Eldon, major & minor workers, n=2; RVA 3011, 12.xi.2012, *M. indica* orchard, Quadrat 5, série 1, variété Ifac, ground nesting, n=1; Korobourou, RVA 3040.3, 20.ii.2013, *M. indica* orchard, prey of *O. longinoda*, 1000-1100 h, minor (part), n=1; RVA 3044.1, 27.ii.2013, *M. indica* orchard, prey of *O. longinoda*, 0900-1000 h, major (part), n=1; RVA 3047.1, 23.i.2013, *M. indica* orchard, prey of *O. longinoda*, 0900-1000 h, minor (part), n=1; RVA 3069.1, 6.ii.2013, *M. indica* orchard, prey of *O. longinoda*, 0800-0900 h, minor worker, n=1; RVA 3078.1, 6.iii.2013, *M. indica* orchard, prey of *O. longinoda*, 0900-1000 h, minor worker brown form, n=1; RVA 3087.1, 4.iv.2013, *M. indica* orchard, prey of *O. longinoda*, 1600-1700 h, major worker, n=1; RVA 3066.1, 20.i.2013, *M. indica* orchard, prey of *O. longinoda*, 1000-1100 h, minor worker, n=1; Kika-Bétérou, RVA 3099.1, 9.xi.2011, running on the ground, minor worker, n=1.

*Camponotus (Tanaemyrmex) proletaria* Baroni Urbani 1971 (Formicidae: Formicinae). Type minor worker CASENT0911997, as *Camponotus maculatus* ssp. *proletaria* nomen novum; type location Guinea, Kindia (Santschi, 1914; as *Camponotus (Myrmoturba) maculatus* F. stirps *miserabilis* n. stirps. Santschi, 1914). No other records. The minor worker from Benin matches the type minor and the major matches the drawing of Santschi (1915). New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2903 3.ix.2012, *M. indica* orchard, Quadrat mixed 3-4, tube 2; ground nesting, major & minor workers, n=3.

*Cardiocondyla emeryi* Forel, 1881 (Formicidae: Myrmicinae). Type worker CASENT0101216; type location Virgin Islands. Pan-tropical tramp species. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3014.2, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, n=3.

*Cardiocondyla neferka* Bolton, 1982 (Formicidae: Myrmicinae). Type worker CASENT0901747; type location Ghana. Also known from Cameroun (Bolton, 1982). New record from Benin: J.-F. VAYSSIÈRES, Tchatchou, RVA 3091.5, 20.iii.2011, on *M. indica*, hand collected, n=3.

*Cataulacus difficilis* Santschi, 1916 (Formicidae: Myrmicinae). Type worker CASENT0912456; type location Benin (maybe Bas Dahomey), holotype only, collector Desanti. Further Benin finding: J.-F. VAYSSIÈRES, Béthel, 8°00'13" N 02°22'57" E, RVA 3004.3, 5.xi.2012, on Poaceae, (larger than type form), n=1.

*Cataulacus guineensis* F Smith, 1853 (Formicidae: Myrmicinae). Type worker CASENT0901968; type location "West Africa". Widely distributed across West Africa and the Congo Basin, arboreal forest species. Reported from Benin, Cotonou, by Santschi (1914). Reviewed by Bolton (1974). Recorded and illustrated by Taylor (1979) from Nigeria, where it was found on up to 3.5% of cocoa trees, both at CRIN and in the 76-farm survey (Taylor 1977; Taylor & Adedoyin 1978). It tends aphids, and could often be found on trees dominated by *O. longinoda*. Further Benin record: S. TCHIBOZO, Forêt de Gnanhouizoumè, 29.i.2007, forêt fourmis (forest ants), n=1.

*Cataulacus satrap* Bolton, 1982 (Formicidae: Myrmicinae). Type worker CASENT0900273; type location Cameroun, sole record. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3096.8, 9.xi.2011, on *Isoperlinia doka*, beating, n=2.

*Crematogaster (Atopogyne) africana* Mayr, 1895 (Formicidae: Myrmicinae). Type minor worker CASENT0919658; type location Cameroun. Widely distributed and common arboreal nesting on large indigenous trees in West Africa and the Congo Basin. New records from Benin: J.-F. VAYSSIÈRES, Agonlin, 55 m asl, RVA 3106, 4.ii.2013, on *M. indica*, hand collected, range of workers, n=5; RVA 3107, 4.ii.2013, on *M. indica*, hand collected, range of workers, n=4; RVA 3108.4, 4.ii.2013, on ground, minor worker, n=1.

*Crematogaster (Crematogaster) brunneipennis* André, 1890 (Formicidae: Myrmicinae). Syntype worker CASENT0902089; type location Sierra Leone. Junior synonym (here) *Crematogaster (Ac.) brunneipennis* And. v. *yorubosa* n. var., Santschi, 1933, from Nigeria, Yaba. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3096, 4, 9.xi.2011, from *Isoperlinia doka*, beating, n=2.



*Crematogaster (Crematogaster)* species (Formicidae: Myrmicinae). This small dark brown species has the propodeal spines reduced to small triangles. Record from Benin, J.-F. VAYSSIÈRES, Tanguiéta, RVA 3094.3, 10.xi.2011, on *Acacia dudgeoni*, beating, n=1.

*Crematogaster (Crematogaster) excisa* Mayr, 1895 (Formicidae: Myrmicinae). Type worker CASENT0919666; type location Congo. Reported from other locations in the Congo Basin, plus Sierra Leone and Nigeria, recorded and illustrated as *Crematogaster* species T<sup>1</sup> (Taylor, 1979), found on cocoa and once nesting in dead wood on a garden tree. New records from Benin: J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2667, 18.iv.2012, *M. indica* orchard, cohabiting with *O. longinoda*, n=2; RVA 2709, 7.xii.2011, *M. indica* orchard, n=3; Korobourou, RVA 2671, 10.v.2012, *M. indica* orchard, weak antagonist of *O. longinoda*, nesting under bark, n=3; RVA 2901, 13.ix.2012, *M. indica* orchard Quadrat 3-1, tube 6, variété: ?, arboreal, n=2; RVA 2932, 7.x.2012, *M. indica* orchard Quadrat 1, tube 1, variété: Kent, arboreal, n=2; RVA 2942, 8.ix.2012, *M. indica* orchard Quadrat 1, tube 3, variété: Gouverneur, arboreal, nest in hollow branch, n=2; Korobourou, RVA 2823, 10.vi.2010, *M. indica* orchard, CAF2/PFRS/T53 (nuit), n=1; RVA 2829, 8.vi.2010, *M. indica* orchard, CAT4/GFN/T59/Parcelle 2 (jour), n=1; RVA 2836, 8.vi.2010, *M. indica* orchard, CAT2/PFRS/T27/Parcelle 2 (nuit), n=1; RVA 2838, 10.vi.2010, *M. indica* orchard, CAT2/PFRS/T71/Parcelle 2 (jour), n=1; RVA 2843, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T23/Parcelle 2 (jour), n=1; RVA 2845, 8.vi.2010, *M. indica* orchard, CAT2/PFRS/T53/Parcelle 2 (jour), n=1; RVA 2846, 10.vi.2010, *M. indica* orchard, CAT2/PFRS/T68/Parcelle 2 (nuit), n=1; RVA 2847, 10.vi.2010, *M. indica* orchard, CAT2/PFRS/T55/Parcelle 2 (jour), n=1; RVA 2855, 8.vi.2010, *M. indica* orchard, CAT2/PFRS/T55/Parcelle 2 (jour), n=2; RVA 2857, 10.vi.2010, *M. indica* orchard, CAT2/PFRS/T72/Parcelle 2 (jour), n=2; RVA 2858, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T57/Parcelle 2 (jour), n=2; RVA 2860, 10.vi.2010, *M. indica* orchard, CAT2/PFRS/T69/Parcelle 2 (jour), n=2; RVA 2869, 15.vi.2010, *M. indica* orchard, CAT2/PFRS/T80/Parcelle 2 (nuit), n=1; RVA 2870, 15.vi.2010, *M. indica* orchard, CAT2/PFRS/T72/Parcelle 2 (jour), n=1. RVA 2972, 8.xi.2012, on *M. indica*, Eldon T2-5, commensal with *O. longinoda*; nesting under bark, n=2; RVA 2973, 8.xi.2012, on *M. indica* Eldon T2-6, commensal with *O. longinoda*, nesting under bark, n=2.

*Crematogaster (Crematogaster) gerstaeckeri* Dalla Torre, 1892 (Formicidae: Myrmicinae). No type images on Antweb, type location Kenya drawings by Menozzi (1930), of a worker from Somalia, and by Taylor (1979) as “*Crematogaster sjostedti*” from Nigeria, where it was recorded nesting in dead wood on trees, including cocoa, where it was a rare finding, and tending aphids. *Crematogaster sjostedti* Mayr, 1907, type location, Tanzania, has short propodeal spines and appears to be a paler brown. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3097.2, 9.xi.2011, on weeds; minor workers, n=3.

*Crematogaster (Crematogaster) painei* Donisthorpe, 1945 (Formicidae: Myrmicinae). Type worker CASENT0902109; type location Ghana. Only other records from Nigeria (Taylor, 1979, as *Crematogaster* species A1), where it nests in dead branch ends and crevices or rot holes on living trees. Probably the commonest member of the subgenus, found on up to 1% of cocoa trees, often in association with *O. longinoda* (Taylor, 1977). It was found tending stictococcids and constructing discrete carton tents. Also found on native shrubs and trees, and on cashew, coffee and kola. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2826, 7.vi.2010, *M. indica* orchard CAT2/PFRS/T19/Parcelle 2 (jour), n=2; RVA 2831, 10.vi.2010, *M. indica* orchard CAT2/PFRS/T71/Parcelle 2 (jour), n=1; RVA 2834, 10.vi.2010, *M. indica* orchard CAT2/PFRS/T49/Parcelle 2 (jour), n=1; RVA 2835, 10.vi.2010, *M. indica* orchard CAT2/PFRS/T50/Parcelle 2 (jour), n=1; RVA 2839, 10.vi.2010, *M. indica* orchard CAT2/PFRS/T64/Parcelle 2 (nuit), n=1; RVA 2840, 10.vi.2010, *M. indica* orchard CAT2/PFRS/T68/Parcelle 2 (jour), n=1; RVA 2841, 10.vi.2010, *M. indica* orchard CAT2/PFRS/T60/Parcelle 2 (jour), n=1; RVA 2842, 8.vi.2010, *M. indica* orchard CAT2/PFRS/T32/Parcelle 2 (nuit), n=1; RVA 2844, 15.vi.2010, *M. indica* orchard CAT2/PFRS/T80/Parcelle 2 (nuit), n=1; RVA 2849, 8.vi.2010, *M. indica* orchard CAT2/PFRS/T29/Parcelle 2 (nuit), n=1; RVA 2851, 7.vi.2010, *M. indica* orchard CAT2/PFRS/T26/Parcelle 2 (jour), n=2; RVA 2853, 8.vi.2010, *M. indica* orchard CAT2/PFRS/T38/Parcelle 2 (jour), n=3; RVA 2862, 10.vi.2010, *M. indica* orchard CAT2/PFRS/T18/Parcelle 2 (jour), n=2; RVA 2864, 8.vi.2010, *M. indica* orchard CAT2/PFRS/T38/Parcelle 2 (nuit), n=1; RVA 2865, 8.vi.2010, *M. indica* orchard CAT2/PFRS/T65/Parcelle 2 (jour), n=2; RVA 2868, 8.vi.2010, *M. indica* orchard CAT2/Parcelle 2 (jour), n=1; RVA 3041.4, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, n=1; RVA 3042, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1400-1500 h, n=1; RVA 3044.4, 27.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, n=1; RVA 3046, 23.i.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, n=1; RVA 3066.2, 20.i.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, n=1; RVA 3067, 20.i.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, n=1; RVA 3068, 6.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, n=1; RVA 3078.3, 6.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, n=1; RVA 3079.2, 6.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, n=1; RVA 3084.1, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1200-1300 h, n=2; RVA 3090.3, 29.xii.2012

on *Anacardium occidentale*, hand collected, n=2; Korobourou, RVA 2908, 24.ix.2012, *M. indica* orchard, quadrat 1, tube 6, variété Gouverneur, arboreal, n=1; Tchatchou, RVA 3091.3, 20.iii.2011, on *M. indica*, hand collected, n=1; Kika-Bétérou, RVA 3098.12, 9.xi.2011, on *Terminalia laxiflora*, n=2.

*Crematogaster (Crematogaster) senegalensis* Roger, 1863 (Formicidae: Myrmicinae). Type location Senegal, no type images. Subspecies *devincta* Santschi, 1914, (as *Crematogaster aegyptiaca* Mayr stirps *senegalensis* Rog. v. *devincta* n. var.), type location Guinea, type worker CASENT0912722. Reported also from Sudan, Somalia, Eritrea and Angola. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2884, 18.x.2012, on *M. indica*, Quadrat 6, tube 1, variété Gouverneur, n=2; RVA 2888, 19.x.2012, *M. indica* orchard, Quadrat 6, tube 3, variété Gouverneur, ground nesting, n=2; Korobourou, RVA 2980.3, 6.xi.2012, beating weeds near the river, n=1.

*Crematogaster (Crematogaster) vidua* Santschi 1928 (Formicidae: Myrmicinae). Type worker CASENT0912726; type location Ivory Coast, sole record. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2980.2, 6.xi.2012, beating weeds near the river, n=2; Glo, F.E.A., RVA 2669, 20.iv.2012, *M. indica* orchard, cohabiting with *O. longinoda*, n=3.

*Crematogaster (Crematogaster) zumpti* Santschi, 1937 (Formicidae: Myrmicinae). As *Crematogaster (Acrocoelia) impressa* Emery stirps *brazzai* v. *zumpti* n. v., Santschi, 1937. Type worker CASENT0912684; type location Cameroun, Missellele. Although similar to *Crematogaster impressa* Emery, this is ca. 87% smaller, has a squarer head in full face view and fine but distinct longitudinal striations on the alitrunk dorsum, specially so on the propodeum. Recorded and illustrated from Nigeria by Taylor (1979) as “*Crematogaster* species F970”, where it was recorded once on okra plants, *Hibiscus esculentus*, in a domestic garden at Idi Ayunre. New records from Benin, J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2662, 26.iv.2012, *M. indica* orchard, observed antagonist of *O. longinoda*, nesting in hollow branches, n=3. J.-F. VAYSSIÈRES, Béthel, RVA 3003, 5.xi.2012, on *Acacia sieberiana*, n=2.

*Crematogaster (Decacrema) costeboriensis* Santschi, 1919 (Formicidae: Myrmicinae). Original name *Crematogaster (Decacrema) solenopsoides* Em. stirps *costeboriensis* n. st., type location Ivory Coast, type worker CASENT0908527. Smaller, darker and with longer propodeal spines than the East African *Crematogaster solenopsides* Emery (CASENT0904483). Recorded and illustrated from Nigeria, as *Crematogaster (Decacrema)* species T<sup>3</sup>, by Taylor (1979). There it nests in dead wood and under dry bark. Occasionally found on cocoa (rare) and native shrubs, also on coffee. New record from Benin: S. TCHIBOZO, Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/border ants), n=1.

*Crematogaster (Sphaerocrema) chlorotica* Emery, 1899 (Formicidae: Myrmicinae). Type worker CASENT0904476; type location Cameroun. Also known from Sierra Leone, junior synonym (here) *Crematogaster (Sphaerocrema) luctans* For. v. *sordidoides* n. var., Santschi, 1930, and Congo (Santschi, 1910). New records from Benin: S. TCHIBOZO, Forêt de Gnanhouizoumè, Bonou, Benin 9, 27.viii.2006, pitfall trap, n=1; J.-F. VAYSSIÈRES, Korobourou, RVA 2886, 18.x.2012, on *M. indica*, Quadrat 6, tube 15, variété Gouverneur, ground nesting, n=2; RVA 2891, 24.x.2012, *M. indica* orchard, Quadrat 6, tube 3, variété Gouverneur, ground nesting, n=2; RVA 2930, 27.ix.2012, *M. indica* orchard, Quadrat 5, tube 8, variété Gouverneur, arboreal, n=2; Korobourou, RVA 2952, on *Anacardium occidentale*, To 15, n=1; RVA 3090.4, 29.xii.2012, on *Anacardium occidentale*, hand collected, n=1; RVA 3093.3, 10.xi.2011, *Acacia sieberiana*, beating, n=2; RVA 3095.2, 10.xi.2011, on *Acacia gourmaensis*, beating, n=1.

*Crematogaster (Sphaerocrema) gambiensis* André 1889 (Formicidae: Myrmicinae). Type worker CASENT0915369; type location Gambia. Widely reported from across sub-Saharan Africa. Taylor (1979) reported and illustrated specimens from Nigeria, found nesting in dead twigs and under bark on trees, including cocoa, where it was an occasional finding, in some blocks on over 1% of trees (Taylor 1977). New records from Benin: J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2708, 7.xii.2011, *M. indica* orchard, n=2; Kika-Bétérou, RVA 3096.3, 9.xi.2011, on *Isoperlinia doka*, beating, n=2.

*Crematogaster (Sphaerocrema) kneri* Mayr, 1862 (Formicidae: Myrmicinae). Type worker CASENT0919670, type location Ghana. Widely reported from across sub-Saharan Africa. Reported from Benin, Cotonou, by Santschi (1915). Taylor (1979) reported and illustrated specimens from Nigeria, nesting in dead wood and under bark on trees, including cocoa where it was moderately common and would nest in old dry cherelles. Constructs tents of vegetable debris over Homoptera (pseudococcids). Also found on native trees, coffee and kola. Additional Benin records: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3098.8, 9.xi.2011, on *Terminalia laxiflora*, minor workers, n=3; Tanguiéta, RVA 3094.4, 10.xi.2011, on *Acacia dudgeoni*, beating, n=2.

*Crematogaster (Sphaerocrema) nigriensis* Santschi, 1914 (Formicidae: Myrmicinae). Type worker CASENT0912809; type location Nigeria, Lagos. Sole prior record. New records from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 10, 27.viii.2006, pitfall trap, n=1; J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2661, 6.iv.2012, *M. indica* orchard, observed antagonist of *O. longinoda*, nesting under bark, n=2; RVA 2666, 18.iv.2012, *M. indica* orchard, weak antagonist of *O. longinoda*, n=3.

*Crematogaster (Sphaerocrema) zavattarii* Menozzi, 1926 (Formicidae: Myrmicinae). Type worker CASENT0912824; type location Nigeria, Port Harcourt. Junior synonym (here) *Cr. (Sph.) zavathari* Men. stirps *edmeae* n. st., Santschi, 1937, from Congo, Brazzaville. Reported and illustrated from Nigeria (Taylor, 1979). Found nesting in dead wood both on the ground and on living trees building carton nests around and under flaky, cankerous bark. Could be a dominant species on cocoa, found on up to 2% of trees throughout the cocoa-growing area of Nigeria (Taylor, 1977). Tends Homoptera and builds carton tents to protect them (Taylor & Griffin, 1981). Also found on native shrubs and trees, and on cashew and kola. New records from Benin: S. TCHIBOZO, Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=1; J.-F. VAYSSIÈRES, Korobourou, RVA 2991, 6.xi.2012, from beating weeds near river, n=2; RVA 2993, 6.xi.2012, from beating weeds near river, n=4; RVA 2991, 6.xi.2012, from beating weeds near river, n=2; R VA 2993, 6.xi.2012, from beating weeds near river, n=4.

*Dorylus (Anomma) burmeisteri* (Shuckard, 1840) (Formicidae: Dorylinae). No images of type worker (subspecies *hybridus* major worker type CASENT0911309); type location Sierra Leone. Despite some taxonomic confusion, this appears to be extremely common and widely distributed across sub-Saharan forests. New record from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 16, 27.viii.2006, pitfall trap, n=5; Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=8.

*Dorylus (Anomma) gribodoi* Emery 1892 (Formicidae: Dorylinae). Type male CASENT0903706 (workers of junior synonym *gerstaeckeri* CASENT0903694); type location Togo. Probably confined to West Africa and the Congo Basin with relatively few reports. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3052, 20.iii.2013, *M. indica* orchard, prey of *O. longinoda*, 1300-1400 h, major worker, n=1.

*Dorylus (Anomma) kohli* Wasmann, 1904 (Formicidae: Dorylinae). Type worker CASENT0911293; type location DR Congo. Scattered reports from West Africa. Taylor (1980b) reported and illustrated it from Nigeria, where it was found nesting in the ground and foraging widely on the surface at the Cocoa Research Institute of Nigeria, Idi Ayunre. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2894 13.ix.2012, *M. indica* orchard, Quadrat 4, tube 3, variété: Gouverneur; ground nesting, major workers, n=2.

*Dorylus (Anomma) nigricans* Illiger, 1802 (Formicidae: Dorylinae). The type is a male but there are no type images; type location Sierra Leone. Despite some taxonomic confusion, this appears to be extremely common and widely distributed across sub-Saharan forests. New records from Benin: S. TCHIBOZO, Forêt de Gnanhouizoumè, 29.i.2007, forêt fourmis (forest ants), n=10; Forêt de Kpinkonzoumè, 19.xii.2006, piège Malaise, forêt fourmis, n=8; J.-F. VAYSSIÈRES, Calavi, IITA station, RVA 2875.1, 16.x.2012, on ground, range of workers, n=6; Kika-Bétérou, RVA 3099.7, 9.xi.2011, running on the ground, media worker, n=1.

*Dorylus (Typhlopone) oraniensis* Lucas, 1849 (Formicidae: Dorylinae). No type images (junior synonym *saharensis* as *Dorylus (Typhlopone) fulvus* var. *saharensis* nov. var., Santschi, 1926; type worker CASENT0911365); type location Algeria. The smallest of the workers from Benin exactly matches the minima worker of *saharensis* (CASENT0911366). New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2961, 2.xi.2012, *M. indica* orchard, Quadrat 2, tube 1, variété Kent, ground nesting, range of workers, n=3.

*Lepisiota acholli* (Weber, 1943) (Formicidae: Formicinae). Type worker CASENT0903162; type location South Sudan. Personal records of BT indicate this is widespread across the sahelian savannah, see also Diamé *et al* (2017). New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2897, 10.ix.2012, *M. indica* orchard, Quadrat 5, tube 2, variété Eldon, ground nesting, n=2; Korobourou, RVA 3076, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1700-1800 h, n=1; RVA 3105.1, 5.ii.2013, *M. indica*, hand collected, n=2; Tanguiéta, RVA 3092.4, 10.xi.2011, *Acacia hockii*, beating, n=1; RVA 3093.4 10.xi.2011, *Acacia sieberiana*, beating, n=3; Kika-Bétérou, RVA 3096.6, 9.xi.2011, *Isobertinia doka*, beating, n=1; RVA 3098.9, 9.xi.2011, *Terminalia laxiflora*, n=2; RVA 3099.16, 9.xi.2011, running on the ground, n=1.

*Lepisiota cacozela* (Santschi, 1914) (Formicidae: Formicinae). Type worker CASENT0912370; type location Congo. Relatively rarely reported from Nigeria and the Congo Basin. Taylor (1978) recorded and illustrated it from Nigeria as quite common, especially on cocoa in Nigeria, where it can be a sub-dominant, with *Crematogaster africana*, on 5-10% of trees, at 53/76 farms (combined result with similar *Lepisiota* species) and regarded as negatively associated with *Oecophylla longinoda*, (Taylor 1977; Taylor & Adedoyin 1978). Found tending aphids and coccids, and building tents of vegetable and other debris. Also found foraging on native herbaceous vegetation and trees, and on cashew and kola. New records from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 11, 27.viii.2006, pitfall trap, n=1; 29.i.2007, Forêt fourmis (forest ants), n=1; J.-F. VAYSSIÈRES, Korobourou, RVA 2672, 10.v.2012, *M. indica* orchard, observed antagonist of *O. longinoda*; nesting in dead branches; workers & male, n=3; RVA 2697, 28.i.2011, *M. indica* orchard, on tree, n=1; RVA 2698, 28.i.2011, *M. indica* orchard, observed antagonist of *O. longinoda*; on tree, n=1 Korobourou, RVA 3090.5, 29.xii.2012, *Anacardium occidentale*, hand collected, n=2; Tanguiéta, RVA 3095.1, 10.xi.2011, *Acacia gourmaensis*, beating, n=1.

*Lepisiota canescens* (Emery, 1897) (Formicidae: Formicinae). Type worker CASENT0905153; type location Somalia. Seemingly common from east to west right across Africa forests and scrub. New records from Benin: S. TCHIBOZO, Forêt de Gbèvozoumè, 28.ii.2007, Lisière fourmis (forest edge/ border ants), n=2; J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2668.2, 20.iv.2012, *M. indica* orchard, cohabiting with *O. longinoda*, n=1; Calavi, IITA station, RVA 2686.1, 1.iv.2011, *M. indica* orchard, n=1; Korobourou, RVA 2694, 28.i.2011, *M. indica* orchard, on ground, n=2; RVA 2700, 28.i.2011, *M. indica* orchard, on ground, n=2; Tanguiéta, RVA 3094.2, 10.xi.2011, *Acacia dudgeoni*, beating, n=1.

*Lepisiota guineensis* (Mayr, 1902) (Formicidae: Formicinae). Type worker CASENT0909872, as *Acantholepis capensis* Mayr var *guineensis* nov. var., Mayr, 1902; type location Ghana. Readily separable from *L. capensis* (Mayr, 1862) as that has stout dark erect hairs whereas this has finer colourless erect hairs whereas. Possibly also found in DR Congo (Wheeler 1922) and Fernando Po (Menozzi 1942e). Reported and illustrated by (Taylor 1978, as the most commonly seen *Lepisiota* at the Cocoa Research Institute of Nigeria, Idi Ayunre, CRIN, where it was one of the most abundant of all ant species. Nests are usually made in dead wood both on standing trees or on the ground. Forage widely across the ground and on almost any vegetation or trees. Dominant on 9-10% of cocoa, and 53/76 farms (combined result with other *Lepisiota* species) in Nigeria, where it was regarded as negatively associated with *Oecophylla longinoda* (Taylor 1977; Taylor & Adedoyin 1978). There they are avid tenders of aphids and coccids, often building tents of soil material over these Homoptera; curiously these soil tents have not been found to be associated with black pod disease. Also found on coffee, kola, oil palm and plantains). New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2702, 28.i.2011, *M. indica* orchard, on ground and on tree, n=2; RVA 2943, 27.ix.2012, *M. indica* orchard, Quadrat 5, tube 3, variété Gouverneur, arboreal, n=2; Korobourou, RVA 2963, 8.xi.2012, *Anacardium occidentale*, To 15, arboreal nesting in hollow branch, n=3; RVA 2969, 8.xi.2012, on *M. indica*; Ifac T2-8; observed as antagonistic to *O. longinoda*, nesting in hollow branch at 2.5 m, n=2; RVA 2977, 7.xi.2012, under bark of Eucalyptus (c), n=2.

*Lepisiota laevis* (Santschi, 1913) (Formicidae: Formicinae). Type worker CASENT0912373; type location Senegal. Reported also from Guinea (Santschi 1914) and DR Congo (Santschi, 1935, subspecies *specularis*). New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2871, 7.vi.2010, *M. indica* orchard, CAT2/PFN/T14/Parcelle 2 (nuit), n=2; RVA 3090.6, 29.xii.2012, *Anacardium occidentale*, hand collected, n=2; Korobourou, RVA 2899, 11.ix.2012, *M. indica* orchard, Quadrat 1, tube 3, variété Kent, ground nesting, n=2; Tchatchou, RVA 3091.6, 20.iii.2011, *M. indica*, hand collected, n=1; Kika-Bétérou, RVA 3096.5, 9.xi.2011, *Isoperlinia doka*, beating, n=2; RVA 3098.10, 9.xi.2011, *Terminalia laxiflora*, n=2; RVA 3097.5, 9.xi.2011, on weeds, n=2.

*Lepisiota monardi* (Santschi, 1930) (Formicidae: Formicinae). Type worker CASENT0912397; type location Angola. No other records apart from variety *australis* (Santschi, 1930) also from Angola. New records from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 12, 27.viii.2006, pitfall trap, n=3; J.-F. VAYSSIÈRES, Korobourou, RVA 2695, 29.xii.2009, *M. indica* orchard, on a rope between trees, n=2; RVA 2696, 29.xii.2009, *M. indica* orchard, nesting in ground, n=2; RVA 2906, 14.ix.2012, *M. indica* orchard, Quadrat 4, tube 1, variété Eldon, arboreal, n=2; RVA 2924, 12.ix.2012, *M. indica* orchard, Quadrat 3, tube 1, variété Dabshar, arboreal, n=2; RVA 2947, 2.x.2012, *M. indica* orchard, Quadrat dixte 2-9, tube 3; arboreal, n=2; Korobourou, RVA 2833, 10.vi.2010, *M. indica* orchard, CAT4/PFN/T84/Parcelle 2 (jour), n=1; RVA 2850, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T07/Parcelle 2 (nuit), n=1; RVA 2863, 7.vi.2010, *M. indica* orchard, CAT2/PFN/T07/Parcelle 2 (jour), n=2; RVA 2867, 7.vi.2010, *M. indica* orchard, CAT2/PFN/T09/Parcelle 2 (jour), n=1; RVA 2955.3, 7.xi.2012, northern zone of mango plantation (~Eucalyptus), beating weeds, n=1; RVA 2970, 8.xi.2012, on *M. indica*, antagonistic to *O. longinoda*, nesting in hollow branch at 2.0 m, n=2; Calavi, RVA 2878, 31.x.2012, on *Terminalia* tree, n=2; Komi, RVA 2984, 6.xi.2012, black ants on an *Annona muricata* tree, n=2.

*Lepisiota* undescribed species Benin RVA 3108 (Formicidae: Formicinae). This densely sculptured species will be fully described in a separate review of African *Lepisiota*. Collection record: J.-F. VAYSSIÈRES, Agonlin, RVA 3108.5, 4.ii.2013, on ground, n=2.

*Lepisiota oculata* (Santschi, 1935) (Formicidae: Formicinae). Type worker CASENT0912401; type location DR Congo, Type collection only. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2691.1, 28.i.2011, *M. indica* orchard, on ground, n=2; RVA 2890.2, 19.x.2012, *M. indica* orchard, Quadrat 6, tube 1, ground nesting, n=1; RVA 2922, 26.ix.2012, *M. indica* orchard, Quadrat 1, tube 1, variété Kent, arboreal, n=2; Korobourou, RVA 2881, 28.1.2011, on ground, n=1; RVA 3087.5, 4.iv.2013, *M. indica* orchard, prey of *O. longinoda*, 1600-1700 h, n=1.

*Lepisiota validiuscula* (Emery, 1897) (Formicidae: Formicinae). Type worker CASENT0905155, as *Acantholepis capensis* Mayr, var. *validiuscula* n. var., Emery, 1897: 602; type location Somalia. Somewhat stockier than *capensis* type; propodeal prominences more pronounced; scape surpasses occiput by ca 1/2 its own length; longer coarser and more abundant erect pilosity; dark brown, appendages brown, scape ochreous-yellow. Seemingly uncommon but

widely distributed in sub-Saharan Africa. Recorded and illustrated from Nigeria by Taylor (1978, as *Acantholepis* species T<sup>1</sup>), who found it occasionally on cocoa, probably nesting in the soil and building tents of vegetable matter around Pseudococcids. New record from Benin: S. TCHIBOZO, Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=1.

*Melissotarsus* undescribed species (Formicidae: Myrmicinae). To be fully described elsewhere but distinguishable by almost totally lacking erect hairs; head and alitrunk shiny reddish-brown, postpetiole yellow, gaster shiny black, TL 2.0 mm. Collected by S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 8, 27.viii.2006, pitfall trap, n=1.

*Meranoplus inermis* Emery 1895 (Formicidae: Myrmicinae). Type worker CASENT0904681; type location South Africa. Reviewed by Bolton (1981). Widely distributed across the sub-Saharan forest zone, including Nigeria and Ghana. Recorded and illustrated from Nigeria by Taylor (1979) who collected it several times tending aphids on cocoa flowers. Several features seemed to separate the specimens from the other *M. inermis* variants. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2925, 10.ix.2012, *M. indica* orchard, Quadrat 1, tube 6, variété Eldon, ground nesting, n=2.

*Messor galla* (Mayr, 1904) (Formicidae: Myrmicinae). Type worker CASENT0904127; type location Ethiopia. Common and abundant across the Sahel (Bolton 1982). New record for Benin: J.-F. VAYSSIÈRES, Parakou, RVA 2995.7, xi.2012, walking on trails on the ground (in glade among mango trees), polymorphic, range of workers, n=6.

*Monomorium afrum* André, 1884 (Formicidae: Myrmicinae). Type worker CASENT0915412; type location Sudan. Reviewed by Bolton (1987). Widely distributed and seemingly common across the Sahel and southwards in East Africa. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2890.1, 19.x.2012, *M. indica* orchard, Quadrat 6, tube 1, ground nesting, n=5; Korobourou, RVA 2980.1, 6.xi.2012, beating weeds near the river, n=2; Tanguiéta, RVA 3095.4, 10.xi.2011, *Acacia gourmaensis*, beating, n=1; Kika-Bétérou, RVA 3098.5, 9.xi.2011, on *Terminalia laxiflora*, n=1; RVA 3099.6, 9.xi.2011, running on the ground, n=3.

*Monomorium bicolor* Emery, 1877 (Formicidae: Myrmicinae). Type worker CASENT0904601; type location South Ethiopia. Widespread tramp species, reviewed by Bolton (1987), Reported and illustrated from Nigeria by Taylor (1980a). Nests in open ground, in Nigeria, foraging on the ground and will tend aphids on cocoa flowers near ground level. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3014.1, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, n=1; RVA 3020.2, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, n=2.

*Monomorium egens* Forel, 1910 (Formicidae: Myrmicinae). Type worker CASENT0908697; type location Cameroun. Reviewed by Bolton (1987), scarce but known from Ivory Coast round to Angola and DR Congo. New record from Benin: J.-F. VAYSSIÈRES, Tchatchou, RVA 3091.7, 20.iii.2011, *M. indica*, hand collected, n=3.

*Monomorium exiguum* Forel 1894 (Formicidae: Myrmicinae). Type worker CASENT0101870; type location Ethiopia. Reviewed by Bolton, (1987). Widespread, although taxonomically very variable. New record from Benin: J.-F. VAYSSIÈRES, Calavi, IITA station, RVA 2686.2, 1.iv.2011, *M. indica* orchard, n=1.

*Monomorium mictilis* Forel, 1910 (Formicidae: Myrmicinae). Type worker CASENT0010759; type location Eritrea. Reviewed by Bolton (1987). Seemingly rare but widespread across African savannah areas. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2950, 13.ix.2012. *M. indica* orchard, Quadrat 2, tube 2, variété Ifac, arboreal, n=2.

*Monomorium trake* Bolton, 1987 (Formicidae: Myrmicinae). Type worker CASENT0902266; type location Ghana. Reported only from Ghana. New records from Benin. J.-F. VAYSSIÈRES, Korobourou, RVA 2938, 14.ix.2012, *M. indica* orchard, Quadrat 4, tube 9, ground nesting, n=3; Tchatchou, RVA 3091.8, 20.iii.2011, *M. indica*, hand collected, n=1; Korobourou, RVA 3105.3, 5.ii.2013, *M. indica*, hand collected, n=1.

*Myrmecaria occidentalis* Santschi, 1920 (Formicidae: Myrmicinae) revived status. Type worker CASENT0900509 (as *Myrmecaria eumenoides* Gerst. stirps *occidentalis* n. st.; raised to species by Santschi (1925); reverted to a stirps of *Myrmecaria baumi* Forel by Santschi (1933), but without any explanation or justification) type location Ivory Coast. Apparently also from Sierra Leone (Santschi 1933b). *M. occidentalis*, however, has uniquely sculptured pedicel segments. In addition, the Benin specimens have dense spiculation on the gaster dorsum, giving a dull appearance. Records from Benin: J.-F. VAYSSIÈRES, Tanguiéta, RVA 3092.3, 10.xi.2011, *Acacia hockii*, beating, n=5; RVA 3093.1, 10.xi.2011, *Acacia sieberiana*, beating, n=2; RVA 3094.1, 10.xi.2011, *Acacia dudgeoni*, beating, n=2; RVA 3095.3, 10.xi.2011, *Acacia gourmaensis*, beating, n=1.

*Nesomyrmex angulatus* (Mayr, 1862) (Formicidae: Myrmicinae). Type worker CASENT0014922; type location Egypt. Reviewed by Bolton (1982, as *Leptothorax angulatus*) including reports from Ghana and Nigeria. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2959, 8.xi.2012, on *Anacardium occidentale*, To 15, n=2; RVA 2967, 8.xi.2012, on *M. indica*, Ifac T2-8, under bark at 3.5 m, n=3; Kika-Bétérou, RVA 3096.10, 9.xi.2011; *Isobertlinia doka*, beating, n=1.

*Odontomachus troglodytes* Santschi, 1914 (Formicidae: Ponerinae). Type worker CASENT0101134; type location Kenya. Very common and widely spread across almost all of sub-Saharan Africa. Recorded and illustrated from Nigeria by Taylor (1976). Found to be common in open or loosely wooded areas. Nests in rotting wood on the ground or in tree stumps or among the roots at the base of tree. It can be dominant throughout the cocoa growing area, on 1.0-2.5% of cocoa trees but only on lower trunk (Taylor 1977; Taylor & Adedoyin 1978). Often found ascending cocoa trees to tend aphids and assorted other Homoptera; activity includes tent-building, using coarse soil and debris. The tents were frequently associated with cocoa black pod infections. New records from Benin: S. TCHIBOZO, Forêt de Gnanhouzoumè, 29.i.2007, forêt fourmis (forest ants), n=1; J.-F. VAYSSIÈRES, Korobourou, RVA 2682, 13.xii.2011, *M. indica* orchard, on ground, n=2; RVA 2898, 10.ix.2012, *M. indica* orchard, Quadrat 5, tube 2, variété Eldon, ground nesting, n=1; RVA 2909, 13.ix.2012, *M. indica* orchard, Quadrat 3, tube 1, variété Gouverneur, ground nesting, n=1; RVA 2937, 11.ix.2012, *M. indica* orchard, Quadrat 3, tube 3, variété Eldon, ground nesting, n=1; RVA 2946, 15.ix.2012, *M. indica* orchard, Quadrat 5, tube 3, variété Ifac, ground nesting, n=1; Korobourou, RVA 2824, 8.vi.2010, *M. indica* orchard, CAT4/GFN/T19/Parcelle 2 (nuit), n=1; RVA 2825, 8.vi.2010, *M. indica* orchard, CAT4/GFN/T25/Parcelle 2 (jour), n=1; RVA 2827, 8.vi.2010, *M. indica* orchard, CAT4/GFN/T36/Parcelle 2 (nuit), n=1; RVA 2828, 8.vi.2010, *M. indica* orchard, CAT4/GFN/T46/Parcelle 2 (jour), n=1; RVA 2830, 7.vi.2010, *M. indica* orchard, CAT4/GFN/T24/Parcelle 2 (jour), n=1; RVA 2832, 15.vi.2010, *M. indica* orchard, CAT4/GFN/T89/Parcelle 2 (jour), n=1; RVA 2837, 15.vi.2010, *M. indica* orchard, CAT2/GFN/T87/Parcelle 2 (jour), n=1; RVA 3043.1, 27.ii.2013, *M. indica* orchard, prey of *O. longinoda*, 0800-0900 h, n =1; RVA 3088.1, 4.iv.2013, *M. indica* orchard, prey of *O. longinoda*, 1700-1800 h, n=1; Calavi, IITA station, RVA 2872, 16.x.2012, on ground, n=2; Kika-Bétérou, RVA 3002, 9.xi.2012, running on ground, n=1; RVA 3099.2, 9.xi.2012, running on the ground, n=1.

*Oecophylla longinoda* (Latreille, 1802) (Formicidae: Formicinae). No type images of major worker, minor worker (*Oecophylla brevinodis* André, 1890) type CASENT0913754; type location Senegal. Abundant and widely distributed across sub-Saharan Africa where the species is a precious tool against fruit pests (Vayssières *et al.* 2016). Reported and illustrated from Nigeria by Taylor (1978) where it was a major dominant on cocoa, as well as being common on coffee and indigenous trees (Taylor 1977, Taylor & Adedoyin 1978). New records from Benin: J.-F. VAYSSIÈRES, Tchatchou, RVA 2692, 3.iii.2011, *M. indica* orchard, on branches of var. cv Eldon, n=2; RVA 3091.1, 20.iii.2011, *M. indica*, hand collected, major worker, n=1; Korobourou, RVA 2880.1, 29.x.2009, on *M. indica*, in nest, minor worker, n=1; RVA 3038.1, 20.ii.2013, *M. indica* orchard, 0800-0900 h, n=1; RVA 3039.1, 20.ii.2013, *M. indica* orchard, 0900-1000 h, headless, n=1; RVA 3040.1, 20.ii.2013, *M. indica* orchard, 1000-1100 h, males, n=3; RVA 3071, 6.ii.2013, *M. indica* orchard, 1300-1400 h, male, n=1; RVA 3077.1, 6.iii.2013, *M. indica* orchard, 0800-0900 h, male, n=1; Korobourou, RVA 2927, 8.ix.2012, *M. indica* orchard, Quadrat 1, tube 2, variété Kent, arboreal, n=1; Kika-Bétérou, RVA 3096.1, 9.xi.2011, *Isoperlinia doka*, beating, major & minor workers, n=2.

*Paltothyreus tarsatus* (Fabricius, 1798) (Formicidae: Ponerinae). No type images (subspecies images, e.g. as *Ponera pestilentia* F Smith 1858, type worker CASENT0900679, from Sierra Leone), type location Senegal, Widely distributed and seemingly common throughout sub-Saharan Africa. Reported from Benin, Savalou, by Santschi (1920a). Commonly known as the ‘Stink Ant’, it nests directly into the ground, with the entrance often surrounded by excavated soil and remains of arthropods and other food. Workers usually forage singly. Additional Benin records: S. TCHIBOZO, Forêt de Gnanhouzoumè, 29.i.2007, forêt fourmis (forest ants), n=1; Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=1; J.-F. VAYSSIÈRES, Korobourou, RVA 2880.1, 29.x.2009, on *M. indica*, prey in nest of *O. longinoda*, n=1; Korobourou, RVA 2921, 12.ix.2012, *M. indica* orchard, Quadrat 2, tube A, variété Gouverneur, ground nesting, n=1; Calavi, IITA station, RVA 2874, 16.x.2012, on ground, n=1; Boko, RVA 2989, 6.xi.2012, on the ground, n=1.

*Paratrechina boltoni* (LaPolla & Fisher, 2011) (Formicidae: Formicinae). Type worker CASENT0179580; type location Gabon. Listed by LaPolla *et al.* (2011) as from West Africa to East Africa to South Africa. Recorded and illustrated from Nigeria (as *Paratrechina* species 1, Taylor, 1978), as nesting in leaf litter and in dead wood on the soil, also under bark on a living tree. Found foraging on cocoa, where it was quite common, on 0.1-1.0% of cocoa trees, tending aphids and perhaps building debris tents (Taylor 1977). Also found foraging on the soil, oil palm and coffee. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2936.1, 7.x.2012, *M. indica* orchard, Quadrat 1, tube 2, variété Kent, ground nesting, n=1.

*Paratrechina jaegerskioeldi* (Mayr, 1904) (Formicidae: Formicinae). No type images (junior synonym *Prenolepis* (*Nylanderia*) *jaegerskioeldi* Mayr var. *borcardi*, nov., Santschi, 1908, type worker CASENT0910993); type location Egypt. Listed by LaPolla *et al.* (2011) as across Equatorial Africa and northward through North Africa. New record from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouzoumè, Benin 7, 27.viii.2006, pitfall trap, n=1.

*Paratrechina longicornis* (Latreille, 1802, as *Formica longicornis*) (Formicidae: Formicinae). No type images; type location Senegal. There are no type images of the Latreille specimen nor of forms listed as junior synonyms by LaPolla *et al.* (2010) with this very distinctive global, invasive, tramp as the type for a monotypic genus. New records from Benin: J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2668.2, 20.iv.2012, *M. indica* orchard, cohabiting with *O. longinoda*, n=2; RVA 2706, 7.xii.2011, *M. indica* orchard, n=2; Calavi, IITA station, RVA 2877.2, 25.x.2012, inside the station on ground, n=1; RVA 3025, 21.x.2012, wall nesting, inside laboratory, n=1; RVA 3100, 16.iv.2013, *Terminalia catappa*, running on trunk, n=2; Parakou, RVA 2988, 7.xi.2012, on ungrafted mango tree, ground nesting, n=2.

*Pheidole andrieui* Santschi, 1930 (Formicidae: Myrmicinae). Type major worker CASENT0913264, minor worker CASENT0913265; type location Mali, Koulouba, only recorded finding. BT has specimens collected from locations right across the Sahel. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2917, 10.ix.2012, *M. indica* orchard, Quadrat 1, tube 4, variété Kent, ground nesting, major & minor workers, n=3; Korobourou, RVA 3059.2, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1200-1300 h, minor, n=1; RVA 3062.1, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1500-1600 h, major, n=1; RVA 3044.3, 27.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, major worker (part), n=1; RVA 3087.4, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, minor worker, n=1.

*Pheidole ascara* Emery, 1901 (Formicidae: Myrmicinae). Type major worker CASENT0904204; type location Ethiopia. Also reported from Kenya (Santschi 1914b). The type (as *Pheidole speculifera* Emery var. *ascarus* n. var.) is darker red-brown than *Ph. speculifera*, has distinctly dark mandibles, a more ovoid head in full face view and a deeper occipital impression. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3038.3, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, major worker, n=1; RVA 3041.1, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, major worker, n=1; RVA 3077.4, 6.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, major worker, n=1; RVA 3078.2, 6.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, major worker, n=1; RVA 3080.1, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, major worker, n=1.

*Pheidole aurivilli* Mayr, 1896 (Formicidae: Myrmicinae). Type major worker CASENT0922187, minor worker CASENT0922188; type location Ghana. Reported severally from West Africa and the Congo Basin. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2699, 29.xii.2009, *M. indica* orchard, nest in ground, major & minor workers, n=4; RVA 2902.1, 7.ix.2012, *M. indica* orchard, Quadrat 1, tube 5, variété Kent, ground nesting, major workers, n=3; RVA 2936.2, 7.x.2012, *M. indica* orchard, Quadrat 1, tube 2, variété Kent, ground nesting, minor worker, n=1; Korobourou, RVA 2848, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T03/Parcelle 2 (jour), minor worker, n=1; RVA 2854, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T12/Parcelle 2 (jour), minor workers, n=2; RVA 2861, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T05/Parcelle 2 (jour), major & minor workers, n=3; RVA 3056.2, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor worker, n=1; RVA 3057.3, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, minor worker, n=1; RVA 3059.1, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1200-1300 h, major worker, n=1; RVA 3060.1, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1300-1400 h, major worker, n=1.

*Pheidole bayeri* Forel 1916 (Formicidae: Myrmicinae). Type major worker CASENT0907818, minor worker CASENT0907819 (as *Pheidole caffra* Emery r. *bayeri* n. stirps); type location DR Congo. It is quite clear from the original description that true *Pheidole caffra* Emery 1895 (type image CASENT0904210, type location South Africa) does not have strongly marked sculpturation on the occiput and the frontal carinae reach the posterior quarter of the head; the colour also is given as ferruginous dull with the gaster piceous and shiny. Therefore, BT has raised the quite distinctive dark *bayeri* to full species status. The sole published records are from DR Congo. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3043.1, 27.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, major worker, n=1; RVA 3077.3, 6.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, major worker, n=1; Kika-Bétérou, RVA 3099.20, 9.xi.2011, running on the ground, major worker, n=1. *Pheidole concinna* Santschi 1910 (Formicidae: Myrmicinae). Type major worker CASENT0913292, minor worker CASENT0913293; type location Congo. Sole prior record. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2914, 11.ix.2012, *M. indica* orchard, Quadrat 4, tube 2, variété Kent, ground nesting, minor workers, n=2; Parakou, RVA 2981, 7.xi.2012, under mango tree on the ground, minor workers, n=2; Korobourou, RVA 3088.3, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1700-1800 h, minor worker, n=1.

*Pheidole corticicola* Santschi, 1910 (Formicidae: Myrmicinae). Type major worker CASENT0913294, minor worker CASENT0913295; type location Congo. Reported also from Angola (Santschi 1937d), Guinea and Ivory Coast (Bernard 1952). New records from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3098.3, 9.xi.2011, on *Terminalia laxiflora*, minor workers, n=2; RVA 3099.18, 9.xi.2011, running on the ground, minor workers, n=2; Korobourou, RVA 3105.2, 5.ii.2013, *M. indica*, hand collected, minor worker, n=1.

*Pheidole costauriensis* Santschi, 1914 (Formicidae: Myrmicinae). Original description as *Pheidole rotundata* For. stirps *costauriensis* n. st., Santschi, 1914, major worker. Type major worker (Antweb) FOCOL1308; type location Ghana. Recorded and illustrated by Taylor (1980a) from Nigeria, with associated major and minor workers. All available samples and the type major are dark brown contrasting with the yellow brown *Pheidole rotundata* Forel 1894. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3099.14, 9.xi.2011, running on the ground, minor worker, n=1.

*Pheidole impressifrons* Wasmann, 1905 (Formicidae: Myrmicinae). Original description as *Pheidole megacephala* subsp. *impressifrons* n. subsp., Wasmann, 1905, type major worker CASENT0914348; type location South Africa. These Benin specimens are similar to the West African forms of Emery (1915), a major worker from Cameroun, CASENT0173311, and a minor worker, CASENT0173310, are listed on Antweb as "*Pheidole punctulata*" but they differ from the types of that species from South Africa (major, CASENT0901316, minor, CASENT0901315). New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3082.2, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, major & minor workers, n=2; RVA 3087.3, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, minor worker, n=1.

*Pheidole katonae* Forel, 1907 (Formicidae: Myrmicinae). Type minor worker CASENT0249072, type location, East Africa, Boma Gombe. Junior synonym (here) *Pheidole bequerti* Forel, 1913; major worker CASENT0907845, minor worker CASENT0907846; type location DR Congo. No other published records. The minor workers have unique ovoid eyes, set well forward of the midline and angled. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3099.19, 9.xi.2011, running on the ground, minor worker, n=1.

*Pheidole megacephala* (Fabricius, 1793) (Formicidae: Myrmicinae). No type images; type location unclear (see note later). Subspecies types, e.g. *Pheidole megacephala* F. v. *duplex* n. var., Santschi, 1937, CASENT0906513 from Angola. A pan-tropical tramp species, often regarded as a nuisance. In Nigeria, from where it was reported and illustrated by Taylor (1980a), it was found to nests in ground or soil in crevices on trees. As well as the abundant findings on cocoa, it was found foraging on native trees, cashew, coffee, kola, oil palm and plantain. One of the commonest and the most widespread ant species on cocoa, dominant on 12-14% of cocoa trees throughout the cocoa growing area, regarded as positively associated with *Oecophylla longinoda*, (Taylor, 1977; Taylor & Adedoyin, 1978). It avidly tends Homoptera, of all main types, and constructs tents of soil, plant or arthropod debris or a combination. The tents, especially those constructed of soil, were frequently associated with cocoa black pod infections and because of this, the ant may be one of the main sources of the onset of the black pod epidemic. Climb high into the trees, up to 320 cm, making debris tents above about 150 cm. New records from Benin: S. TCHIBOZO, Forêt de Gnanhouzoumè, 29.i.2007, forêt fourmis (forest ants), minor workers, n=2; Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=1; J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2703, 8.iii.2012, *M. indica* orchard, on ground and tree, minor workers, n=2; RVA 2704, 7.xii.2011, *M. indica* orchard, minor workers, n=2; Korobourou, RVA 2912.3, x.2012, *M. indica* orchard, Quadrat mixte 2-2, tube 1, variété Eldon, ground nesting, minor workers, n=2; RVA 2913, 18.x.2012, *M. indica* orchard, Quadrat 3, tube 2, variété Ifac. ground nesting, minor workers, n=2; RVA 2929, 13.x.2012, *M. indica* orchard, Quadrat mixte 2-3, tube 1, variété Kent, arboreal, minor workers, n=2; Korobourou, RVA 3039.5, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor worker, n=1; RVA 3069.3, 6.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, minor worker, n=1; RVA 3072, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, melanistic major, n=1; RVA 3073.1, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, major worker, n=1; RVA 3074.3, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1300-1400 h, minor worker, n=1; RVA 3075.2, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, major worker, n=1; RVA 3083, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, melanistic minor, n=1; RVA 3088.2, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1700-1800 h, major worker, n=1.

*Pheidole melancholica* Santschi, 1912 (Formicidae: Myrmicinae). Original publication as *Pheidole punctulata* Mayr stirps *melancholica* n. st., Santschi, 1912, type major worker CASENT0906154, minor worker CASENT0906533; type location Ivory Coast. Differs from the type *P. punctulata* (CASENT0901316) in being dark red-brown and not yellow brown. BT has other specimens from Cameroun and Congo. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3038.4, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, major workers, n=3; RVA 3039.2, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, major worker, n=1; RVA 3041.2, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, major worker; n=1.

*Pheidole neutralis* Santschi, 1914 (Formicidae: Myrmicinae). Original description as *Pheidole occipitalis* André stirps *neutralis* n. st., Santschi 1914, type major worker CASENT0913378, minor worker CASENT0913379; type location Guinea. Separable from *Pheidole occipitalis* by the darker colour and on the major the spiculate sculpture



on the postpetiole and base of the gaster. No other records. BT has numerous other specimens from West Africa and the Congo Basin. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2691.2, 28.i.2011, *M. indica* orchard, on ground, minor workers, n=3; RVA 2948, 3.xi.2012, *M. indica* orchard, Quadrat 3, tube 1, variété Eldon, ground nesting, minor workers, n=2; RVA 2954, 11.ix.2012, *M. indica* orchard, Quadrat 4, tube A, variété Kent, ground nesting, n=2; RVA 3018, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur; ground nesting, minor workers, n=2; Korobourou, 09°22'21" N 02°40'13" E, RVA 2960, 8.xi.2012, on *Anacardium occidentale*, To 15, ground nesting, minor workers, n=2; RVA 3038.5, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, minor workers, n=3; RVA 3039.4, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor workers, n=2; RVA 3040.5, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, minor worker, n=1; RVA 3048.1, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, minor worker, n=1; RVA 3049, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor worker, n=1; RVA 3050, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, minor worker, n=1; RVA 3051, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, minor worker, n=1; RVA 3053.2, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1500-1600 h, minor worker, n=1; RVA 3056.1, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor worker, n=1; RVA 3069.2, 6.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, minor worker, n=1; RVA 3073.2, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, minor worker, n=1; RVA 3077.2, 6.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, minor worker, n=2.

*Pheidole nigrifella* Bernard, 1952 (Formicidae: Myrmicinae). Type major worker CASENT0915441, minor worker CASENT0913735; type location Guinea. Only published record. BT has numerous other specimens from West Africa and the Congo Basin. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2918, 17.ix.2012, *M. indica* orchard, Quadrat 1, tube 1, variété Ifac, ground nesting (nuit), minor workers, n=2; RVA 2923.1, 2.ix.2012, *M. indica* orchard, Quadrat mixte 1-3, tube 1, ground nesting, minor workers, n=2; RVA 2885, 19.x.2012, on *M. indica*, Quadrat 6, tube 3, variété Gouverneur, minor workers, n=2; Korobourou, RVA 2859, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T03/Parcelle 2 (nuit), minor workers, n=2; RVA 2866, 8.vi.2010, *M. indica* orchard, CAT2/PFRS/T37/Parcelle 2 (jour), minor workers, n=2; Kika-Bétérou, RVA 3097.4, 9.xi.2011, on weeds, minor workers, n=2.

*Pheidole occipitalis* André 1890 (Formicidae: Myrmicinae). Type major worker CASENT0907825, minor worker CASENT0907826; type location Sierra Leone. Sole other record is subspecies *Pheidole occipitalis* André v. *adami* n. v., Santschi, 1939f: 161, minor worker, from Guinea, Iles de Los. BT has a record of a minor worker from Ghana. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3085, 4.iv.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1300-1400 h, major worker, n=1.

*Pheidole pullata* Santschi, 1914 (Formicidae: Myrmicinae). Original publication as *Pheidole mentita* var. *pullata* n. var., Santschi, 1914, type major worker CASENT0913350, minor worker CASENT0913351; type location Guinea. No other records. Santschi noted this as: TL 4.2 mm. Differing from the type (*P. mentita*, type major CASENT0913348) in being black, the mandibles partly dull red, the tibiae and tarsi brown. More matt and also a little more strongly sculptured, the base of the gaster lightly punctate. The occiput slightly less impressed. BT has other specimens from Ghana and Gabon. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2701, 8.i.2011, *M. indica* orchard, on ground, minor workers, n=3.

*Pheidole rohani* Santschi, 1925 (Formicidae: Myrmicinae). Type major worker no images, type minor CASENT 0913424 (subspecies *Pheidole rohani* Sants. st. *pellax*, n. stirps, Santschi, 1930, type major CASENT0913426, type minor 0913427); type location Angola. All recorded forms are from Angola. BT has a minor worker from the Central African Republic. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3075.3, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, minor worker, n=1.

*Pheidole saxicola* Wheeler, 1922 (Formicidae: Myrmicinae). Type major worker CASENT0913450, minor worker RMCAENT000017751; type location DR Congo. Sole published record. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2928.2, 5.x.2012, *M. indica* orchard, Quadrat 2, tube 1, variété Kent, ground nesting, minor worker, n=1; RVA 2900, 5.ix.2012, *M. indica* orchard, Quadrat 1, tube 2, variété Kent, ground nesting, minor workers, n=2; Korobourou, RVA 3074.2, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1300-1400 h, minor worker, n=1.

*Pheidole senilifrons* Wheeler, 1922 (Formicidae: Myrmicinae) new status (here). Type major worker (as *Pheidole caffra* subspecies *senilifrons*, new subspecies) CASENT0003145, minor worker CASENT0006021; type location DR Congo. Recorded only from DR Congo. It is quite clear from the original Emery description and the type image, CASENT0904210, that true *caffra* does not have strongly marked sculpturation on the occiput and the frontal carinae reach the posterior quarter of the head; the colour also is given as ferruginous, dull with the gaster piceous and shiny. BT

has a minor worker from Congo. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3040.4, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, minor worker, n=1; RVA 3045.1, 27.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, minor worker, n=1; RVA 3056.3, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor worker, n=1; RVA 3079.1, 6.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, major worker, n=1; Korobourou, RVA 3017.1, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, minor worker, n=1; RVA 3016, 9.xi.2012, 02°40'16" E, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur; ground nesting, minor worker, n=1.

*Pheidole* undescribed species (Formicidae: Myrmicinae). Reported and illustrated from Nigeria by Taylor (1980a, major and minor workers) as a fairly common species nesting in dead wood and crevices and trees, including cocoa. Tends aphids and pseudococcids, and constructs tents of vegetable and arthropod debris. Also found foraging on the ground and on native trees, cashew, kola and oil palm. New record from Benin: J.-F. VAYSSIÈRES, Tchatchou, RVA 3091.4, 20.iii.2011, *M. indica*, hand collected, minor worker, n=1.

*Pheidole tenuinodis* Mayr, 1901 (Formicidae: Myrmicinae). Type major worker CASENT0922204, minor worker CASENT0922203; type location South Africa. Apparently widely distributed in eastern and southern Africa. BT has numerous specimens from across West Africa, plus those listed here. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2934, 12.ix.2012, *M. indica* orchard, Quadrat 3, tube 3, variété Kent, ground nesting, major and minor workers, n=3; Korobourou, RVA 3063.2, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1600-1700 h, major worker, n=1.

*Pheidole termitophila* Forel, 1904 (Formicidae: Myrmicinae). Type major worker CASENT0907853, minor worker CASENT0907854; type location South Sudan. Quite numerous records from across West Africa, including subspecies *liberiensis* (*Pheidole termitophila* Forel subsp. *liberiensis* n. subsp., Forel, 1911e) from Liberia. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2910, 10.ix.2012, *M. indica* orchard, Quadrat 1, tube 5, variété Kent, ground nesting, minor workers, n=2; RVA 3017.2, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, minor workers, n=2.

*Pheidole welgelegenensis* Forel, 1913 (Formicidae: Myrmicinae). Type major worker CASENT0249075, minor worker CASENT0249073; type location DR Congo (as *Pheidole sculpturata* Mayr r. *Welgelegenensis* n. stirps). Junior synonym *Pheidole sculpturata* Mayr stirps *dignata* n. stirps, Santschi, 1915c, from Congo. Widely distributed across West Africa and the Congo Basin (BT personal records). Readily separated from *Pheidole sculpturata* by the coarser and denser punctate sculpturation. New records from Benin: J.-F. VAYSSIÈRES, Calavi, IITA station, RVA 2873, 16.x.2012, on ground, minor workers, n=2; RVA 2877.1, 25.x.2012, inside the station on ground, minor workers, n=2; Korobourou, RVA 2939, 12.ix.2012, *M. indica* orchard, Quadrat 2, tube 3, variété Gouverneur, ground nesting, minor workers, n=2; RVA 2940, 8.ix.2012, *M. indica* orchard, Quadrat 1, tube 1, variété Kent, ground nesting, major & minor workers, n=2; RVA 3019, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, major worker, n=1; Korobourou, 09°22'21" N 02°40'13" E, RVA 3044.2, 27.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor workers, n=5; RVA 3047.2, 23.i.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor worker, n=1; RVA 3039.3, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, minor worker, n=1; RVA 3048.2, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0800-0900 h, minor worker, n=1; RVA 3054, 20.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1700-1800 h, minor worker, n=1; RVA 3074.1, 13.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1300-1400 h, minor worker, n=1; RVA 3041.3, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1100-1200 h, minor worker, n=1; Agonlin, RVA 3108.6, 4.ii.2013, on ground, minor worker, n=2.

*Pheidole* species RVA2663 (Formicidae: Myrmicinae). To be described in full elsewhere, this species is similar in overall form to *Pheidole welgelegenensis* but the major worker is some 25% larger. The minor worker has a pronounced coarsely reticulate sculpture on the alitrunk dorsum. Recods: J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2663, 26.iv.2012, *M. indica* orchard, indifferent to *O. longinoda*, ground nesting, major and minor workers, n=3; RVA 2693.2, 8.iii.2011, *M. indica* orchard, minor workers, n=3; Calavi, IITA station, RVA 2875.2, 16.x.2012, on ground, minor worker, n=1; Boko, RVA 2992, 6.xi.2012, running on ground, minor workers, n=2; Agonlin, RVA 3108.7, 4.ii.2013, on ground, minor worker, n=1.

*Plagiolepis (Plagiolepis) brunni* Mayr, 1895 (Formicidae: Formicinae). Type worker CASENT0915711; type location Mozambique. Widespread across sub-Saharan Africa but seemingly generally uncommon. Recorded and illustrated by Taylor (1978) from Nigeria, where it was an abundant species, commonly found on over 7% of cocoa trees and at 65/76 farms, but seeming to play no significant role in the ant mosaic. Will tend aphids and occasionally builds tents. Also found foraging on native trees, kola, oil palm and plantain (Taylor, 1977; Taylor & Adedoyin, 1978). New record from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 1, 27.viii.2006, pitfall trap, held in mandibles of *Tapinoma modestum*, n=1.

*Platythyrea conradti* Emery, 1899 (Formicidae: Ponerinae). Type worker CASENT0903795; type location Cameroun. Widely distributed across West Africa and the Congo Basin. Recorded and illustrated by Taylor (1976) from Nigeria, where it was found on 1% or more of cocoa trees at CRIN, but always in small numbers (Taylor, 1977). Nests found in dead branch ends and crevices on live trees. Usually forage singly on cocoa and surrounding shrubs, tend Homoptera and may build debris tents. New records from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 4, 27.viii.2006, pitfall trap, n=1; 29.i.2007, forêt fourmis (forest ants), n=1; Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=1.

*Polyrhachis concava* André, 1889 (Formicidae: Formicinae). Type worker CASENT0910903; type location Sierra Leone. Reviewed by Bolton (1973b). An arboreal species found across West Africa and the Congo Basin. Recorded and illustrated by Taylor (1978) from Nigeria, from shrub vegetation. New records from Benin: S. TCHIBOZO, Forêt de Gnanhouizoumè, 29.i.2007, forêt fourmis (forest ants), n=2; Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=1.

*Polyrhachis militaris* (Fabricius, 1781) (Formicidae: Formicinae). No type images, type location “Tropical Africa”. Variably coloured junior synonyms, e.g. *Polyrhachis militaris* F. subsp. *cupreopubescens* var. *calabarica* n. var., Forel, 1907a, from Nigeria, type CASENT0910907;. Reviewed by Bolton (1973b). An arboreal species found across West Africa and the Congo Basin. Recorded and illustrated by Taylor (1976) from Nigeria, common on cocoa, on about 1% of trees but in small numbers, and will nest in old dried pods on the trees. Also found on native herbaceous vegetation and trees, and on kola and oil palm. New record from Benin: S. TCHIBOZO, Forêt de Gbèvozoumè, 28.ii.2007, lisière fourmis (forest edge/ border ants), n=1.

*Psalidomyrmex foveolatus* André, 1890 (Formicidae: Ponerinae). Type worker CASENT0101471; type location Sierra Leone. Reviewed by Bolton (1975b), found across West African forests. Recorded and illustrated by Taylor (1976) from Nigeria, collected from soil at the base of a cocoa tree at the Cocoa Research Institute of Nigeria, Idi Ayunre. Soil nesting and foraging under the surface. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, RVA 3099.3, 9.xi.2011, running on the ground, n=1, queen.

*Strumigenys maynei* Forel, 1916 (Formicidae: Myrmicinae). Type worker CASENT0909335; type location DR Congo. Reviewed by Bolton (1983, as *Serrastruma maynei*), recorded from across West Africa and the Congo Basin. Mainly nests in rotten wood on trees or in the leaf litter. New record from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 15, 27.viii.2006, pitfall trap, n=1, queen.

*Strumigenys rufobrunea* Santschi, 1914 (Formicidae: Myrmicinae). Type worker CASENT0912863; type location Guinea. Reviewed by Bolton (1983), recorded from several West African countries. A leaf litter species. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3022, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, n=1.

*Tapinolepis (Mesanoplolepis) pernix* (Viehmeyer, 1923) (Formicidae: Formicinae). Type worker FOCOL2894; type location Sudan, sole published record. Also known from Senegal (Diamé *et al.* (2017)). BT also has others from Sudan. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2949, 11.ix.2012, *M. indica* orchard, Quadrat 4, tube A, variété Kent, ground nesting, n=2.

*Tapinoma carininotum* Weber, 1943 (Formicidae: Dolichoderinae). No type images but an original drawing; type location South Sudan, sole published record. Note: similar to *Tapinoma lugubre* (type CASENT0903070) but that appears to be rather darker brown with contrasting pale appendages. Recorded and illustrated from Nigeria by Taylor (1978, as *Tapinoma detorquens*). Ground nesting, in dead wood and in the soil, it was fairly abundant on cocoa at the Cocoa Research Institute of Nigeria, Idi Ayunre, on up to 5% of trees in some blocks, but usually not so common. It can be positively associated with *Crematogaster depressa* and negatively associated with *Pheidole megacephala* (Taylor, 1977). Tends aphids. Also found on native herbaceous vegetation, cashew, kola and oil palm. New Benin record: J.-F. VAYSSIÈRES, Korobourou, RVA 2933, 15.ix.2012, *M. indica* orchard, Quadrat 4, tube 5, variété Dabshar, ground nesting, n=2.

*Tapinoma luridum* Emery, 1908 (Formicidae: Dolichoderinae). Type worker CASENT0904030; type location DR Congo. No other records. BT has others from Cameroun, Congo and the Central African Republic. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, 09°22'21" N 02°40'13" E, RVA 2974, 7.xi.2012, ground nesting at base of Eucalyptus, n=2.

*Tapinoma* undescribed species RVA 2965 (Formicidae: Dolichoderinae). Distinguished by its small size, relatively long scapes, and a shiny, yellow brown appearance. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2965, 8.xi.2012, on *M. indica*, Ifac T2-8, arboreal nesting in hollow branch, queen & workers, n=3.

*Tapinoma melanocephalum* (Fabricius, 1793) (Formicidae: Dolichoderinae). No type images, type location French Guyana. Junior synonyms, e.g. *Tapinoma (Micromyrma) melanocephalum* Mayr, v. *australe* var. n., Santschi, 1928e: 475, worker, from Vanuatu, type worker CASENT0903063. Pan-tropical tramp species. Recorded and illustrated by

Taylor (1978) from Nigeria, common in houses. New records from Benin: J.-F. VAYSSIÈRES, Calavi, IITA Station, RVA 2956, 11.xi.2012, n=2; RVA 3103, 21.iv.2013, in house, feeding on Bostrichidae corpse, n=2.

*Tapinoma modestum* Santschi, 1932 (Formicidae: Dolichoderinae). Type worker CASENT0911574; type location Zimbabwe. No other published records. BT has others from across sub-Saharan Africa. New record from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 1, 27.viii.2006, pitfall trap, n=1.

*Tetramorium aculeatum* (Mayr, 1866) (Formicidae: Myrmicinae). Type worker CASENT0919643; type location Ghana. Reviewed by Bolton (1980). Common and widely distributed arboreal species. Recorded and illustrated by Taylor (1979) from Nigeria. A major dominant of closed canopy cocoa, on up to 15% of trees in Nigeria, where it was regarded as negatively associated with *Oecophylla longinoda* (Taylor, 1977; Taylor & Adedoyin, 1978), and other tree crops with suitable, large softish leaves on the underside of which, or between which, the ants build their well-known 'felt' nests (right, clickable image). Tends Homoptera. Also found on native shrubs and trees, and on cashew, coffee and kola. New records from Benin: J.-F. VAYSSIÈRES, Glo, F.E.A., RVA 2659, 26.iv.2012, *M. indica* orchard, very antagonistic to *O. longinoda*, nesting between leaves; includes sexuals, n=4; RVA2665, 18.iv.2012, *M. indica* orchard, weak antagonists of *O. longinoda*, n=2; RVA 2693.1, 8.iii.2011, *M. indica* orchard, n=1; RVA 2705, 7.xii.2011, *M. indica* orchard, n=2.

*Tetramorium anxium* Santschi, 1914 (Formicidae: Myrmicinae). Type worker CASENT0906134; type location Guinea. Reviewed by Bolton (1980). New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2902.2, 7.ix.2012, *M. indica* orchard, Quadrat 1, tube 5, variété Kent, ground nesting, n=3; RVA 2923.2, 2.ix.2012, *M. indica* orchard, Quadrat mixte 1-3, tube 1, ground nesting, n=1; Korobourou, RVA 2852, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T04/Parcelle 2 (nuit), n=2; RVA 2856, 7.vi.2010, *M. indica* orchard, CAT2/PFRS/T04/Parcelle 2 (jour), n=2.

*Tetramorium bellicosum* Bolton, 1980 (Formicidae: Myrmicinae). Type worker CASENT0901203; type location Nigeria. Only records from the Cocoa Research Institute of Nigeria, including the illustrated report by Taylor (1980). Nests in leaf litter and in the ground. New record from Benin: J.-F. VAYSSIÈRES, Kika-Bétérou, 09°14'07" N 02°11'52" E, RVA 3099.11, 9.xi.2011, running on the ground, n=2.

*Tetramorium caldarium* (Roger, 1857) (Formicidae: Myrmicinae). Syntype worker CASENT0102333; type location Germany (in hothouse). Reviewed by Bolton (1980) who noted it as a panglobal tramp species, probably of African origin, with West African records from Nigeria and Ivory Coast. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, 09°22'13" N 02°40'16" E, RVA 2928.1, 5.x.2012, *M. indica* orchard, Quadrat 2, tube 1, variété Kent, ground nesting, n=1.

*Tetramorium granulatum* Bolton, 1980 (Formicidae: Myrmicinae). Type worker CASENT0901204; type location Nigeria. Sole collection. Taylor (1980) reported the original finding with an illustration, two workers found nesting in soil at the base of a cocoa tree, in the Cocoa Research Institute of Nigeria, Idi Ayunre. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2904, 18.ix.2012, *M. indica* orchard, Quadrat 3, tube 4, variété Ifac, ground nesting, n=2.

*Tetramorium raptor* Hita Garcia & Fisher, 2014 (Formicidae: Myrmicinae). Type worker CASENT0195628; type location Cameroun. Other records from Cameroun and Nigeria (Hita Garcia & Fisher 2014). Earlier reported and illustrated from Nigeria by Taylor (1980a), as *Decamorium decem*, nesting in rotten logs or twigs in leaf litter, forages in leaf litter, often in single file. Will prey on termites. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2911, 18.viii.2012, *M. indica* orchard, Quadrat 1, tube 1, variété Eldon, ground nesting, n=2.

*Tetramorium sericeiventre* Emery, 1877 (Formicidae: Myrmicinae). Type worker CASENT0102073; type location Eritrea. Reviewed by Bolton (1980) with very numerous records from across the whole of Africa. Noted as being quite variable in the intensity of the red general colour. Recorded and illustrated from Nigeria by Taylor (1980), noting it as basically a savannah species. New records from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2895, 14.ix.2012, *M. indica* orchard, Quadrat 4, tube 8, ground nesting, n=2; RVA 3020.1, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, n=2; Korobourou, RVA 3056.6, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 0900-1000 h, n=1; RVA 3060.3, 27.iii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1300-1400 h, n=1; Kika-Bétérou, RVA 3099.12, 9.xi.2011, running on the ground, n=3; Agonlin, RVA 3108.3, 4.ii.2013, on ground, n=1.

*Tetramorium versiculum* Bolton, 1980 (Formicidae: Myrmicinae). Type worker CASENT0901207; type location Ghana. Other records from Ghana and Ivory Coast. New record from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouizoumè, Benin 2, 27.viii.2006, pitfall trap, n=1.

*Tetramorium (Triglyphothrix) muscorum* Arnold, 1926 (Formicidae: Myrmicinae). Type worker CASENT0901145; type location Mozambique. Reviewed by Bolton (1976) and recorded from scattered location throughout the African forests. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3021, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, n=2.

*Tetramorium (Xiphomyrmex) angulinode* Santschi, 1910 (Formicidae: Myrmicinae). Type worker ZFMKHYM20096255; type location Congo. Reviewed by Bolton (1980) and regarded as a very variable species. Distributed across much of sub-Saharan Africa. New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 3040.6, 20.ii.2013, *M. indica* orchard, observed prey of *O. longinoda*, 1000-1100 h, n=1.

*Tetramorium (Xiphomyrmex) legone* Bolton, 1980 (Formicidae: Myrmicinae). Type worker CASENT0901170; type location Ghana. Also known from Nigeria (Bolton 1980). New record from Benin: J.-F. VAYSSIÈRES, Korobourou, RVA 2926, 10.ix.2012, *M. indica* orchard, Quadrat 1, tube 6, variété Kent, ground nesting, n=2.

*Tetramorium (Xiphomyrmex) occidentale* (Santschi, 1916) (Formicidae: Myrmicinae). Type worker CASENT0915037; type location Cameroun. Reviewed by Bolton (1980, with records from Guinea east and south to Angola). New record from Benin: S. TCHIBOZO, Bonou, Forêt de Gnanhouzoumè, Benin 3, 27.viii.2006, pitfall trap, n=1.

*Trichomyrmex oscaris* (Forel, 1894) (Formicidae: Myrmicinae). Type (minor) worker CASENT0908712; type location Ethiopia. Reviewed by Bolton (1987, as *Monomorium oscaris*). Widely distributed in drier areas of sub-Saharan Africa. Recorded and illustrated by Taylor (1980a, as *Syllophopsis* species 1) from Nigeria, ground nesting and foraging. New Benin records: J.-F. VAYSSIÈRES, Korobourou, RVA 3012, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, media worker, n=1; RVA 2919, 1.ix.2012, *M. indica* orchard, Quadrat 1, tube 1, variété Kent, ground nesting, media worker, n=1; RVA 3013, 9.xi.2012, *M. indica* orchard, Quadrat 1, série 1, variété Gouverneur, ground nesting, range of workers, n=3.

## Discussion

The historic records of ants from Benin enumerate only 22 ant species, all apparently randomly collected. Our collections have brought this total to 133 species of which only six were recorded before. Four species appear to be new to science. Thirteen of the historic records, however, were from Haut-Dahomey, Djougou, Kouandé, in the dry Soudanian region which is outwith the mango farm area. Four named species were first described from Benin. Sixty-two of the species have been recorded in Nigeria, almost all being documented by Taylor (1976-80) as being found within the western cocoa farm ecosystem. Those and almost all the others appear to be endemic to West Africa, i.e. Cameroun westwards, or to the soudano-sahel zone. A small number are pan-African or tramp species. Tramp species listed by Hita Garcia *et al.* (2013) on Kenya ants and also found in Benin are *Tapinoma melanocephalum*, *Paratrechina longicornis*, *Cardiocondyla emeryi*, *Pheidole megacephala*, *Tetramorium caldarium* and *Hypoponera punctatissima*. As in Kenya and elsewhere in sub-Saharan Africa, the most prolific ant subfamilies in Benin are Myrmicinae with 76 species, and Formicinae, with 34 species. The most speciose genera are *Pheidole*, 23 species, *Camponotus*, 17 species, *Crematogaster*, 17 species almost all arboreal, and *Tetramorium*, 11 species. At the species level the most frequently collected were *Camponotus flavomarginatus*, *Ca. carbo*, *Ca. acvapimensis*, *Ca. maculatus*, *Crematogaster excisa*, *Cr. painei*, *Lepisiota cacozela*, *L. guineensis*, *L. monardi*, *Odontomachus troglodytes*, *Pheidole aurivilli*, *P. megacephala*, *P. neutralis*, and *P. welgelegenensis*. All except *Ca. carbo*, *Cr. excisa*, *L. monardi*, *P. aurivilli*, *P. neutralis* and *P. welgelegenensis* are among the most common species in the western Nigeria cocoa farms, the only real surprise being the presence of *P. aurivilli* on mango but not on cocoa tree.

We list three species of *Paratrechina*, adhering to the Motschouky (1863) original genus definition and type species. Braet & Taylor (in press) have addressed the issue. From their conclusions, all species placed in *Nylanderia* as defined by LaPolla *et al.* (2010) should be reverted to *Paratrechina*. The status of the anomalous species *Paratrechina longicornis* requires further consideration.

We continue to use subgenera for *Crematogaster* as they are useful and practical for separations of the speciose genus. Many taxonomists outside of myrmecology regularly use subgenera. The myrmecology useage of “species group” appears to mean something different to the much wider ICZN useage and but seems no different to the historic subgenera.

In the original description (Latreille 1802), the type location for *Pheidole megacephala* was given as “l’île de France”, which at the time of the first description was (and still is) a region in north-central France surrounding Paris (currently spelled as “Île-de-France”). The specimens may well have been found in a hothouse containing tropical plants. Emery (1915) related how the type of *Formica megacephala* was described by Latreille in 1802 from specimens living in Paris, that is to suppose “l’île de France”, and was in the Bosc collection kept in the Paris Museum. Carlos Emery had asked Mr L Berlaud to look for the type but it could not be found. Emery noted that in view of the confusion and

lack of the type or “topotypes” he maintained the name *Ph. megacephala* (F.) but without formally designating a type. The name “African Big-Headed Ant” is generally used for the species, e.g. by Wetterer (2007) but Fischer & Fischer (2013) designated a “neotype” from Mauritius. That could be deemed unnecessary given that good specimens of the junior synonyms exist, e.g. *duplex* (see earlier). Although they examined many specimens from across the tropics, from the sub-Saharan area they listed only a few samples from East Africa and sighted few types of their junior synonyms. On the wider separation of *Pheidole*, we are aware of the use of “species groups” by Fischer *et al.* (2012). Apart from the “*P. pulchella*” group, however, they gave no detailed analysis to support their separations of other groups and list many trinomials.

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