



# Scale Insects (Hemiptera Coccoidea) developing on mango tree in Benin

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Inventory of scale insects developing on Mango is given for Benin, *Giagantococcus euphorbiae*, *Giagantococcus nigroareolatus*, *Ceroplastes uapacae*, *Parasaissetia nigra*, *Saissetia privigna*, *Udinia catori*, *Ferrisia virgata*, *Paracoccus interceptus*, *Phenacoccus solenopsis*, *Rastrococcus invadens*, *Aonidiella orientalis*, *Lepidosaphes tapleyi*. Among 12 identified species, 11 are noted for the first time in Benin. They were collected on leaves and on mangoes (petioles and fruits). Most of them are associated and protected by ants as *Udinia catori* by the weaver ants *Oecophylla longinoda*.

List of species recorded from Benin on mango tree  
 (\*: first report of the species in this country)



## Gigantococcus euphorbiae

Collector J.-F. Vayssières, 05/05/2007 in Tchatchou.  
 Described under the name of *Icerya euphorbiae* by Brain, 1915 from South Africa, on Euphorbia tree.  
 Economic importance: not known as pest.  
 Distribution: restricted to South Africa and Zimbabwe.  
 Host-plants: belonging at least to six botanical families in which Euphorbiaceae, Fabaceae and Moraceae.



## Ferrisia virgata

Collector J.-F. Vayssières, 18/05/2006 at Tchatchou and N'Dali.  
 Described from Jamaica under the name of *Dactylopusia virgata* by Cockerell 1893, on grass.  
 Economic importance: minor pest.  
 Distribution: Pan-tropical.  
 Host-plants: highly polyphagous.



## Gigantococcus nigroareolatus

Collector J.-F. Vayssières, 04/05/2005 at N'Dali.  
 Described from Uganda on coffee under the name *Icerya nigroareolata* by Newstead, 1917.  
 Economic importance: not known as pest.  
 Distribution: known distribution restricted to Uganda, Ghana, Kenya and Zaire.  
 Host-plants: *Acalypha* and *Croton* (Euphorbiaceae), *Coffea* (Rubiaceae) and *Theobroma cacao* (Sterculiaceae).



## Paracoccus interceptus

Collector J.-F. Vayssières, 24/02/2006 at Komi and N'Dali, Ina.  
 Described from Philippines by Erzart & McConnell, 1956, under the name *Allocooccus morrisonianus* *Lantium domesticum* (Meliaceae).  
 Economic importance: minor pest.  
 Distribution: oriental from India to Indonesia.  
 Host-plants: developing on eighteen botanical families.



## Ceroplastes uapacae

Collector J.-F. Vayssières, 04/04/2007 in Tchatchou (S.D.).  
 Described from Zimbabwe by Hall, 1931 on *Uapaca kirkiana* (Euphorbiaceae) et *Eugenia malaccensis* (Myrtaceae).  
 Economic importance:  
 Distribution: widespread in sub-Saharan Africa, from Senegal to South Africa.  
 Host-plants: polyphagous on high botanical families in which Euphorbiaceae, Myrtaceae and Rutaceae.



## Phenacoccus solenopsis

Collectors J.-F. Vayssières, 22/06/2006 at Tchatchou.  
 Described from USA (New-Mexico), found on ant, *Solenopsis geminata* Fabricius by Tinsley, 1898.  
 Economic importance: injurious to cotton  
 Distribution: Neotropical and nearctic, also in China, India, Pakistan, Nigeria and Cameroon.  
 Host-plants: Developing on about fifty botanical families of which Cucurbitaceae.



## Parasaissetia nigra

Collector J.-F. Vayssières, 06/04/2006 at Tchatchou, also at Dassa Akbowele, Save Dibo.  
 Described on the name *Lecanium nigrum* by Nietner, 1861, from Sri Lanka on coffee.  
 Economic importance: minor pest.  
 Distribution: Cosmopolitan species.  
 Host-plants: very polyphagous species.



## Rastrococcus invadens

Collector J.-F. Vayssières, 24/02/2006 at Parakou (Mnry), then at Parakou Koro.  
 Described from Pakistan by Williams, 1986 on *Mangifera indica* (Anacardiaceae).  
 Economic importance: Pest of mango.  
 Distribution: oriental and spreading in tropical Africa.  
 Host-plants: very polyphagous developing on about thirty botanical families.



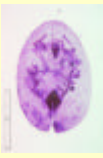
## Saissetia privigna

Collector J.-F. Vayssières, 04/05/2007 at Ina (L.S.).  
 Described by De Lotto, 1965 from Kenya, Ruitui, on *Coffea arabica*.  
 Economic importance: minor pest.  
 Distribution: East and south Africa (from Eritrea to South Africa). Given from India, Pakistan and Sri Lanka, Egypt, Israel, Turkey and Greece.  
 Host-plants: Polyphagous at least ten botanical families in which Rubiaceae, Rutaceae and Solanaceae.



## Aonidiella orientalis

Collector J.-F. Vayssières, 9/10/2007 at Natringou.  
 Described from India, Andhra Pradesh by Newstead, 1894 on *Panicum* sp. (Poaceae) under the name *Aspidiotus orientalis*.  
 Economic importance: reported as pest of Citrus, Tea, date palm, papaya, mango.  
 Distribution: widely distributed in tropical and subtropical areas, in Africa East and South part.  
 Host-plants: highly polyphagous developing on more than seventy botanical families.



## Udinia catori

Collector J.-F. Vayssières, 06/04/2006 at Kakara (O.B.), also found at Tchatchou, Komi, Korobouro, Dassa Akbowele, N'Dali.  
 Described under the name of *Lecanium catori* by Green in 1915 from Nigeria on kola nut.  
 Economic importance: minor pest.  
 Distribution: afro-tropical from Senegal to Sudan.  
 Host-plants: polyphagous, sixteen botanical families in which Anacardiaceae, Rubiaceae and Rutaceae.



## Lepidosaphes tapleyi

Collector J.-F. Vayssières, 23/06/2007 at Parakou Koro.  
 Described from Sudan, Shendion *Mangifera indica* (Anacardiaceae) by Williams, 1960.  
 Economic importance: pest of sugar cane.  
 Distribution: Sudan, Egypt, Tanzania, India, Indonesia and some Pacific islands.  
 Host-plants: developing on seventeen botanical families.

MARGARODIDAE		
* <i>Gigantococcus</i>	<i>euphorbiae</i>	(Brain, 1915)
* <i>Gigantococcus</i>	<i>nigroareolatus</i>	(Newstead, 1917)

COCCIDAE		
* <i>Ceroplastes</i>	<i>uapacae</i>	Hall, 1931
<i>Parasaissetia</i>	<i>nigra</i>	(Nietner, 1861)
* <i>Saissetia</i>	<i>privigna</i>	De Lotto, 1965
* <i>Udinia</i>	<i>catori</i>	(Green, 1915)
<i>Udinia</i>	<i>farquharsoni</i>	(Newstead, 1922)

PSEUDOCOCCIDAE		
* <i>Ferrisia</i>	<i>virgata</i>	(Cockerell, 1893)
<i>Maconelliococcus</i>	<i>hirsutus</i>	(Green)
<i>Nipaococcus</i>	<i>viridis</i>	(Newstead, 1894)
* <i>Paracoccus</i>	<i>interceptus</i>	Lit, 1997
<i>Phenacoccus</i>	<i>madeirensis</i>	Green, 1923
<i>Phenacoccus</i>	<i>manihoti</i>	Matile-Ferrero, 1944
* <i>Phenacoccus</i>	<i>solenopsis</i>	Tinsley, 1893
<i>Rastrococcus</i>	<i>invadens</i>	Williams, 1986

STICTOCOCCIDAE		
<i>Parasictococcus</i>	<i>multispinosus</i>	(Newstead, 1908)
<i>Stictococcus</i>	<i>sjostedti</i>	Cockerell, 1903

DIASPIDIDAE		
<i>Aonidiella</i>	<i>citrina</i>	(Coquillett, 1891)
* <i>Aonidiella</i>	<i>orientalis</i>	(Newstead, 1894)
<i>Aspidiotus</i>	<i>destructor</i>	Cockerell, 1869)
<i>Aspidiotus</i>	<i>elaeidis</i>	Marchal, 1909
<i>Aulacaspis</i>	<i>tubercularis</i>	Newstead, 1903
* <i>Lepidosaphes</i>	<i>tapleyi</i>	Williams, 1960
<i>Pinnaaspis</i>	<i>strachani</i>	(Cooley, 1898)
<i>Pseudoaonidia</i>	<i>trilobitiformis</i>	(Green, 1896)
<i>Spinaspidotus</i>	<i>fissidens</i>	(Lindinger, 1909)
<i>Unaspis</i>	<i>citri</i>	(Comstock, 1881)

They are few studies on Coccoidea from Benin. The data base ScaleNet gives only 17 species present in this country. That seems well little compared with the quantity of species present at close Nigeria. The collected samples included few species already recorded in previous studies in Benin and highlighted the presence of 10 species newly recorded (Table 1). The majority of these species are rather cosmopolitan and polyphagous like *Parasaissetia nigra*, *Ferrisia virgata* or *Rastrococcus invadens*.

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