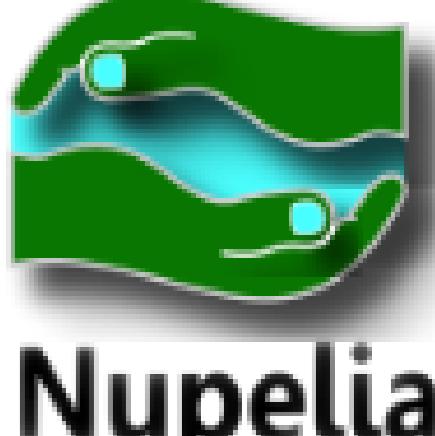




NON-MARINE OSTRACODS (CRUSTACEA) FROM NEW CALEDONIA, PACIFIC OCEAN

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The New Caledonian archipelago, situated in the Pacific Ocean, North East of Australia, and one of Earth's top 25 priority conservation regions (Myers *et al.* 2000), is known for its rich biodiversity and a high proportion of endemism in flora and fauna. Thus far, only 16 species of non-marine ostracods were reported. After three hydrobiological expeditions (2016, 2017, 2018) to the main island of the archipelago (Grande Terre) organized by the Muséum national d'Histoire naturelle (Paris, France), several more species were found.

We have collected about 350 samples from a variety of water bodies, such as rivers, small streams, lakes and temporary pools (Figure 1). We have found close to 40 species of Ostracoda of which several taxa are new to Science (Table 1, Figure 2). Two new species, *Cyprinotus drubea* and *Strandesia mehesi* have already been described.

Table 1. Ostracod species from New Caledonia island.

Superfamily Darwinuloidea Brady & Robertson, 1885	Subfamily Cypricercinae McKenzie, 1971
Family Darwinulidae Brady & Robertson, 1885	<i>Strandesia mehesi</i> Kissieh, Higuti & Martens, 2020
<i>Darwinula stevensonii</i> (Brady & Robertson, 1870)	<i>Strandesia sanoamuangae</i> Savatenalinton & Martens, 2010
<i>Vestalenula marmionieri</i> Rossetti & Martens, 1999	<i>Strandesia</i> sp. 3 sp. n.
Also as <i>Penthelenula brasiliensis</i> (=stage A-1 of Vm)	<i>Strandesia</i> sp. 4 sp. n.
<i>Vestalenula</i> group <i>pagliolii</i>	
<i>Vestalenula</i> group <i>danielopoli</i> sp.n.	
Superfamily Cytheroidea Baird, 1850	Subfamily Herpetocypridinae Kaufmann, 1900
Family Cytherideidae Sars, 1925	<i>Candonocypris novaezelandiae</i> (Baird, 1843)
? <i>Cyprideis australiensis</i> Hartmann, 1978	Syn. <i>Candonopsis caledonica</i> (in Meisch <i>et al.</i> 2007)
<i>Cyprideis consobrina</i> (Brady, 1890)	Syn. <i>Herpetocypris caledonica</i> Méhes, 1939
Family Limnocytheridae Sars, 1925	Syn. <i>Candonocypris caledonica</i> (Méhes, 1939)
<i>Limnocythere notodonta</i> Vávra, 1906	Syn. <i>Herpetocypris caledonica</i> var. <i>minor</i> Méhes, 1939
(<i>Elpidium</i> spp.n.)	<i>Ilyodromus</i> sp. 1
(<i>Gomphocythere</i> spp.n.)	<i>Ilyodromus</i> sp. 2
Family unknown	<i>Ilyodromus</i> gen. n. sp. 1 sp. n.
(Cytheroidea spp. n.)	<i>Stenocypris major</i> (Baird, 1859)
Superfamily Cypridoidea Baird, 1845	Syn. <i>Stenocypris malcolmsoni</i> Brady, 1886 (in Méhes, 1939)
Family Notodromadidae Kaufmann, 1900	<i>Stenocypris malayica</i> Victor & Fernando, 1981
<i>Kennethia major</i> (Méhes, 1939)	As: <i>Stenocypris marginata</i> Daday, 1910 (in Méhes, 1939)
Syn: <i>Notodromas major</i> Méhes, 1939	<i>Stenocypris</i> sp. 3
Family Cyprididae Baird, 1845	Herpetocypridinae gen.n. spec.n.
Subfamily Cypridinae Baird, 1845	
<i>Cypridopsis granulata</i> (Daday, 1910)	Subfamily Cyprettinae Hartmann, 1971
Subfamily Cyprinotinae Bronstein, 1947	<i>Cypretta</i> spp.n.
<i>Cyprinotus drubea</i> Martens, Yavuzatmaca & Higuti, 2019	Subfamily Cypridopsinae Kaufmann, 1900
<i>Heterocypris incongruens</i> (Ramdohr, 1808)	<i>Cypridopsis vidua</i>
<i>Hemicypris</i> sp. 1	Syn. <i>Cypridopsis sarasini</i> Méhes, 1939 (new syn.)

Most noteworthy are an endemic radiation of *Gomphocythere*, different species of *Elpidium*, and several new species of *Cypretta*. *Elpidium* are invasive species, because they were imported through their host bromeliads, a true case of "Noahs Arch" invasions. But as these species can only live in their bromeliad tanks, they form no danger for native New Caledonian faunas.



Figure 1. Location of sampling points on the New Caledonia island.

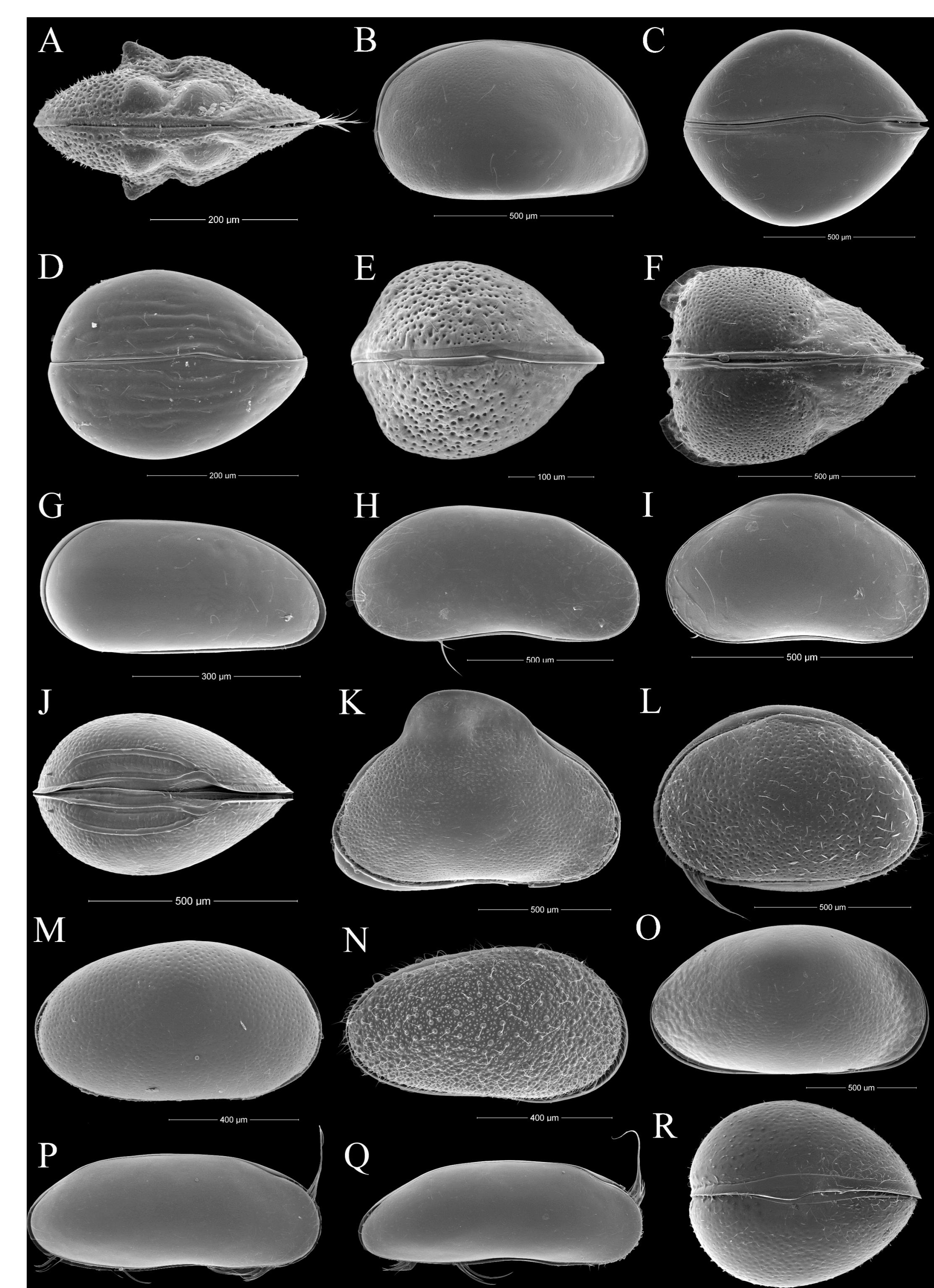


Figure 2. Examples of ostracods from New Caledonia, illustrated with Scanning Electron Microscopy. A: *Limnocythere*; B, C: *Elpidium*; D, E: *Cytheroidea* spp.n.; F: *Gomphocythere*; G: *Vestalenula*; H: *Candonopsis*; I: *Candona*; J: *Newnhamia*; K: *Cyprinotus*; L: *Hemicypris*; M-O: *Strandesia*; P, Q: *Stenocypris*; R: *Cypretta*.

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