

J a f M ca S d e

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Ge e ic h e ics a d achi e a i g cha ge c e acce ed s ecies
i s f he d s ai (P a a: B h ie b idae) he Is f Pi es,
Ne Ca ed ia

Ma hie Q e ¹, S e e A. T e ic ¹, Fab ice B escia² a d Ma M ga -Richa ds¹

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² *Journal of Invertebrate Taxonomy*, 11(222), 4442

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Populations. The first data set is the second. First data set is the first set of data (Zelich, Sidi & Shee, 2004). The second data set is the second set of data (Zelich, 2004). The third data set is the third set of data (Rohlf & Mace, 1993; Mader, 2008) and the fourth data set is the fourth set of data (Cajal, Rodriguez-Padilla & Raza, 2005; Cui, Pan & Rohlf, 2012; Gsafs, 2014; Di & Jac, 2015; Gsafs & B, 2016; Van, 2017, 2018; Ra, 2018; Ve haege, 2018). The fifth data set is the fifth set of data (Mader, 1789) and the sixth data set is the sixth set of data (Pfeifer, 1851) and the seventh data set is the seventh set of data (Gade, 2015). These data sets are the eighth data set (The Isf, 152) and the ninth data set is the ninth data set (Bescia, 2011).

Here, the second data set is the second set of data (Ri, 1994). The third data set is the third set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e)

A total of 26 species of the Isf has been identified. The first species is the first species of the first set of data (D, 2015). The second species is the second species of the second set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The third species is the third species of the third set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The fourth species is the fourth species of the fourth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The fifth species is the fifth species of the fifth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The sixth species is the sixth species of the sixth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The seventh species is the seventh species of the seventh set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The eighth species is the eighth species of the eighth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The ninth species is the ninth species of the ninth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e).

MATERIAL AND METHODS

Second data set is the second set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The third data set is the third set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The fourth data set is the fourth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The fifth data set is the fifth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The sixth data set is the sixth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The seventh data set is the seventh set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The eighth data set is the eighth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e). The ninth data set is the ninth set of data (he, se, f, g, adie, desce, ad, bac, aga, a, i, h, s. Ass, cia, e, i, d, e, ade, a, i, g, a, se, f, f, l, l, d, A, f, ces, ()e).

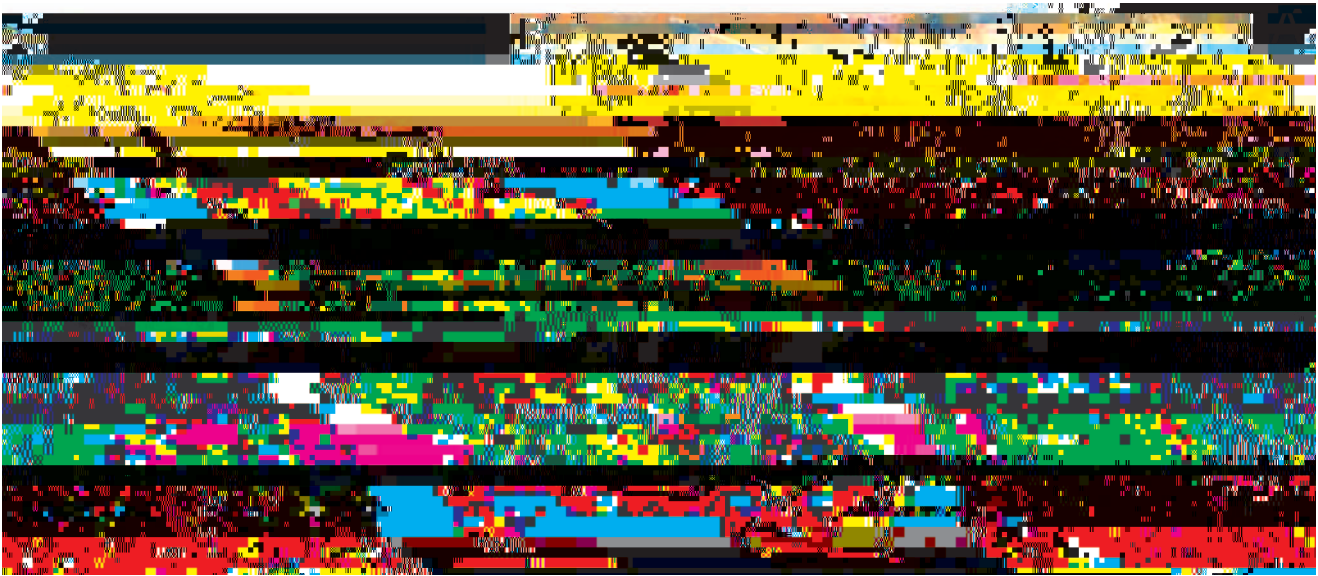


Figure 1. A. Topographic map of the Islands of Pié, New Caledonia, highlighting the distribution of the species *Chrysomelidae*. B. Topographic map of the Islands of Pié, New Caledonia, highlighting the distribution of the species *Chrysomelidae* (in age: R, d, M, is).

C. The case of the species as a high-precision.



Figure 2. A. Sheffield Wednesday in the 40th day of the season. Digital image, based on the original image, is shown in dashed line. Red dashed line indicates the position of the flare. B, C. Results of the first (B) and second (C) principal components analysis of the flare image.



Table 1. Number of individuals in the hierarchical clustering (species) as assigned by supervised and unsupervised analysis, of shell size and shape of eight populations of *Gastropoda* from the Islands of the Pacific, New Caledonia.

Population	Comwagna	Gadji	Kere	Touete	Vao	Waatchia	Wapan	Youaty	Total
Supervised learning classification									
<i>P. fibratus</i>	0	29	31	26	52	38	23	25	224
<i>P. porphyrostomus</i>	8	9	7	7	16	9	5	0	61
Not assigned	28	1	2	1	3	1	15	0	51
Unsupervised learning classification									
<i>P. fibratus</i>	0	29	32	26	53	38	23	25	226
<i>P. porphyrostomus</i>	4	9	7	7	15	9	5	0	56
Intermediate phenotype	32	1	1	1	3	1	15	0	54

Individuals were accepted as assigned to a cluster only if their assignment score was >0.95.

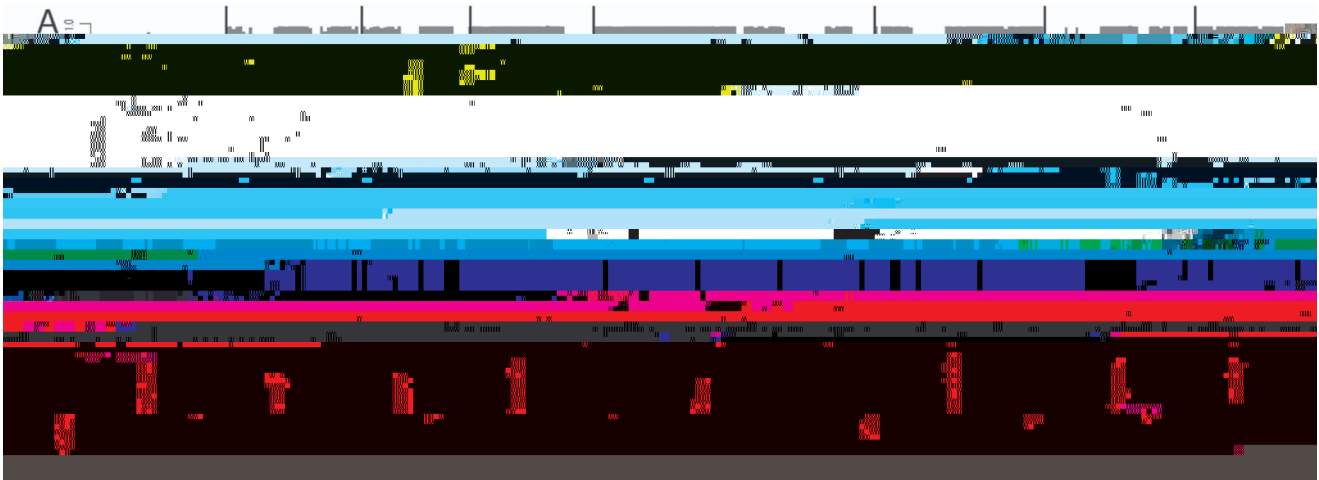


Figure 4. Assignment of individuals based on shell size and shape analysis. **A.** Number of individuals assigned to a species (the recognized species). Color coding: green, blue, red, yellow, black. **B.** Assignment based on a Gaussian mixture model (GMM) of the individuals (the recognized species and the intermediate phenotype). Color coding: green, blue, red, yellow, black.

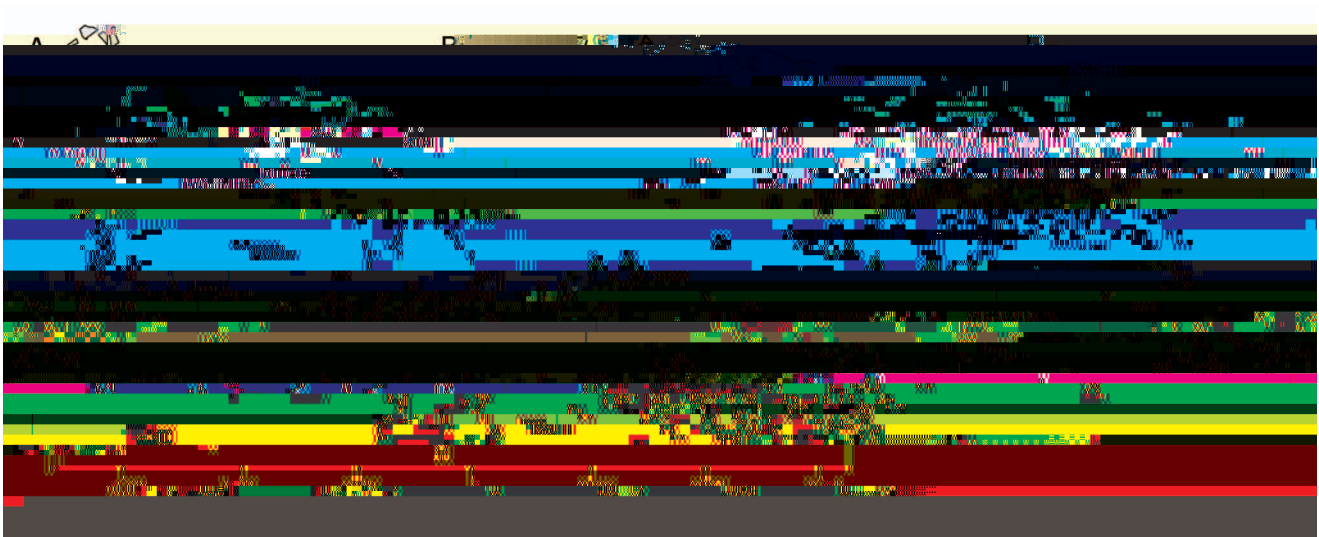


Figure 5. **A.** Relief plot of the first two principal components (PC1 and PC2) of the individuals (the recognized species and the intermediate phenotype) as indicated by the GMM, using the first two PCs of the shape (50.8% of the shape variance) and shell size. **B.** Gaussian mixture model (GMM)-based classification of the individuals (the recognized species and the intermediate phenotype) using PC1 (35.3%). Color coding: green, blue, red, yellow, black.

BRESCIA, F. 2011.