QUEENSLAND MUSEUM NETWORK

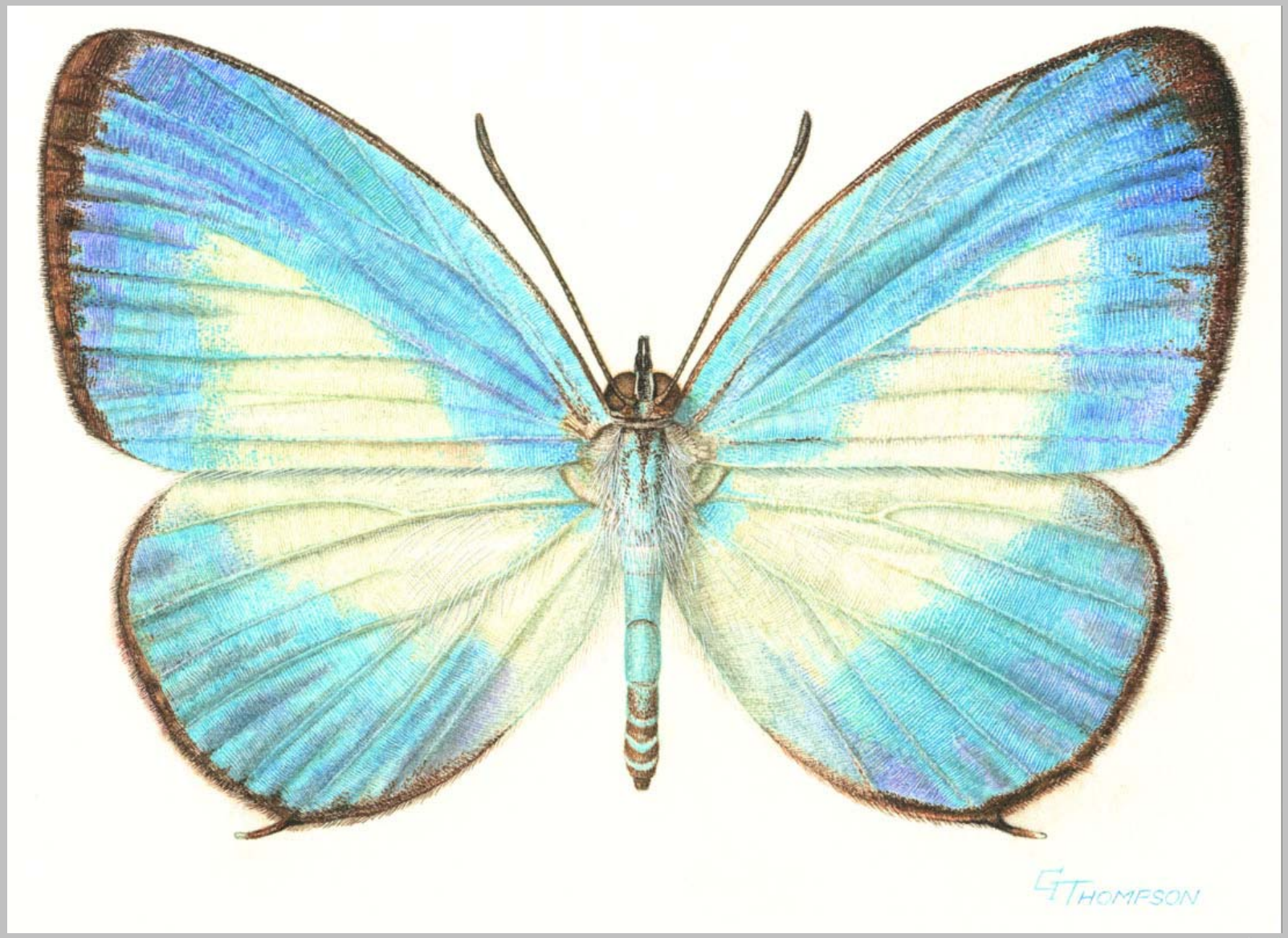
Hasselblad H4D-200MS Drawer Imaging

Geoff Thompson

Queensland Museum

Queensland Government

I was an insect collection manager and illustrator



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Worked with QM collection for 30 years

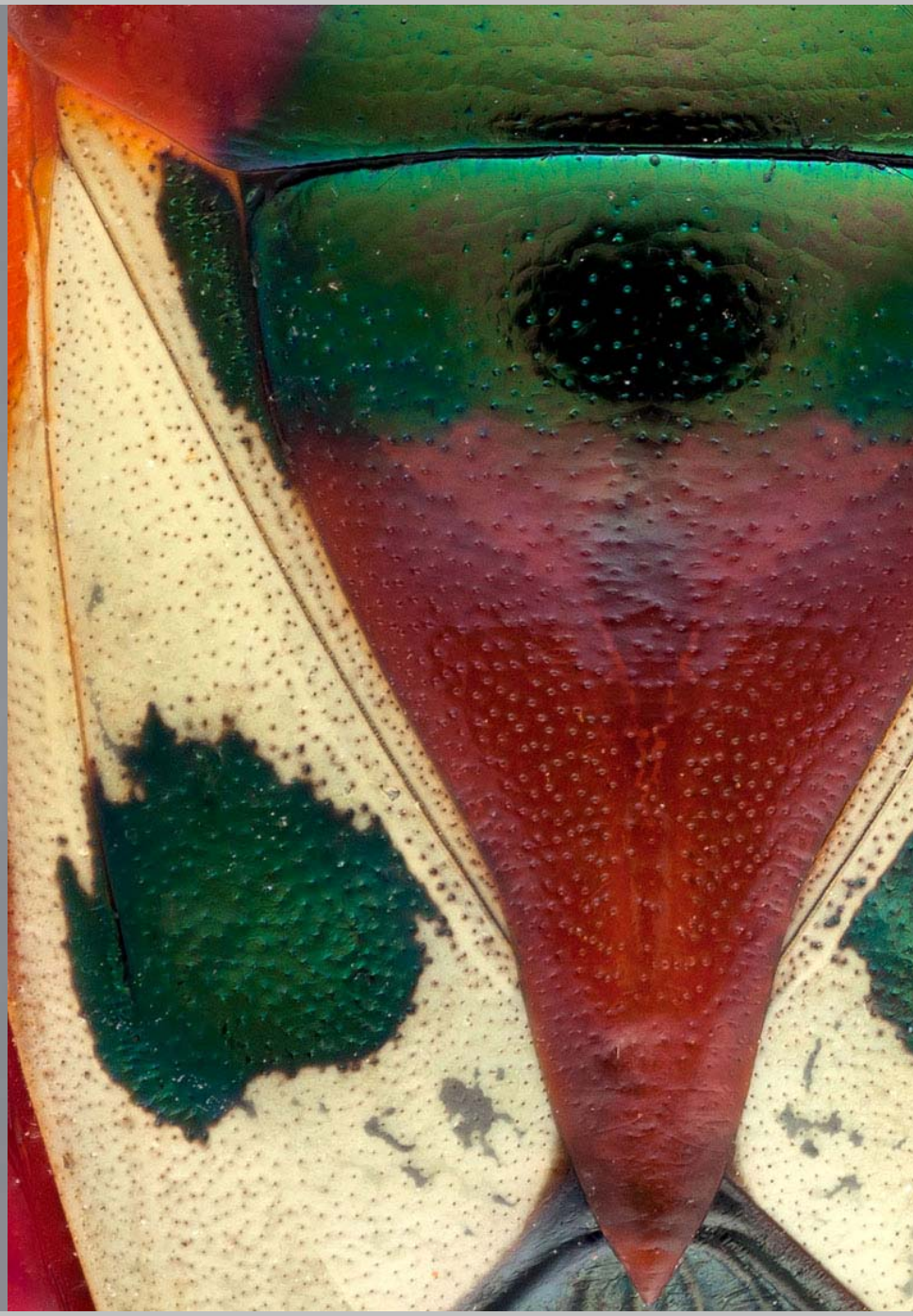
2005 Qld-Smithsonian Fellowship -to evaluate microphotography systems, learn digital illustration techniques & share expertise

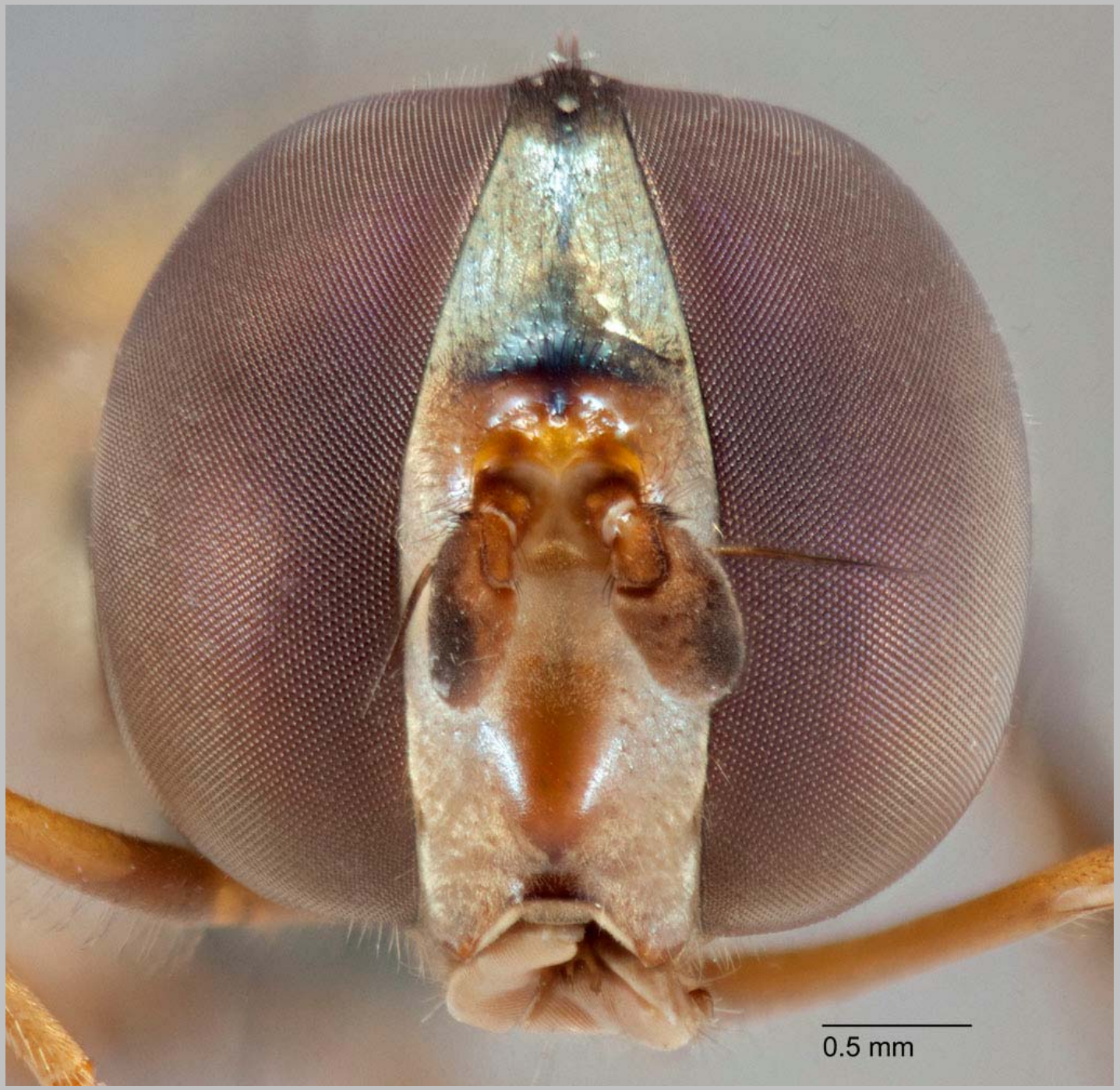
In 2011 won contract from Atlas of Living Australia to purchase photographic assets and use them to supply images of QM biological collections

Now a Collection Imager for whole Queensland Museum

Mostly do focus-stacked images

2 mm




0.5 mm

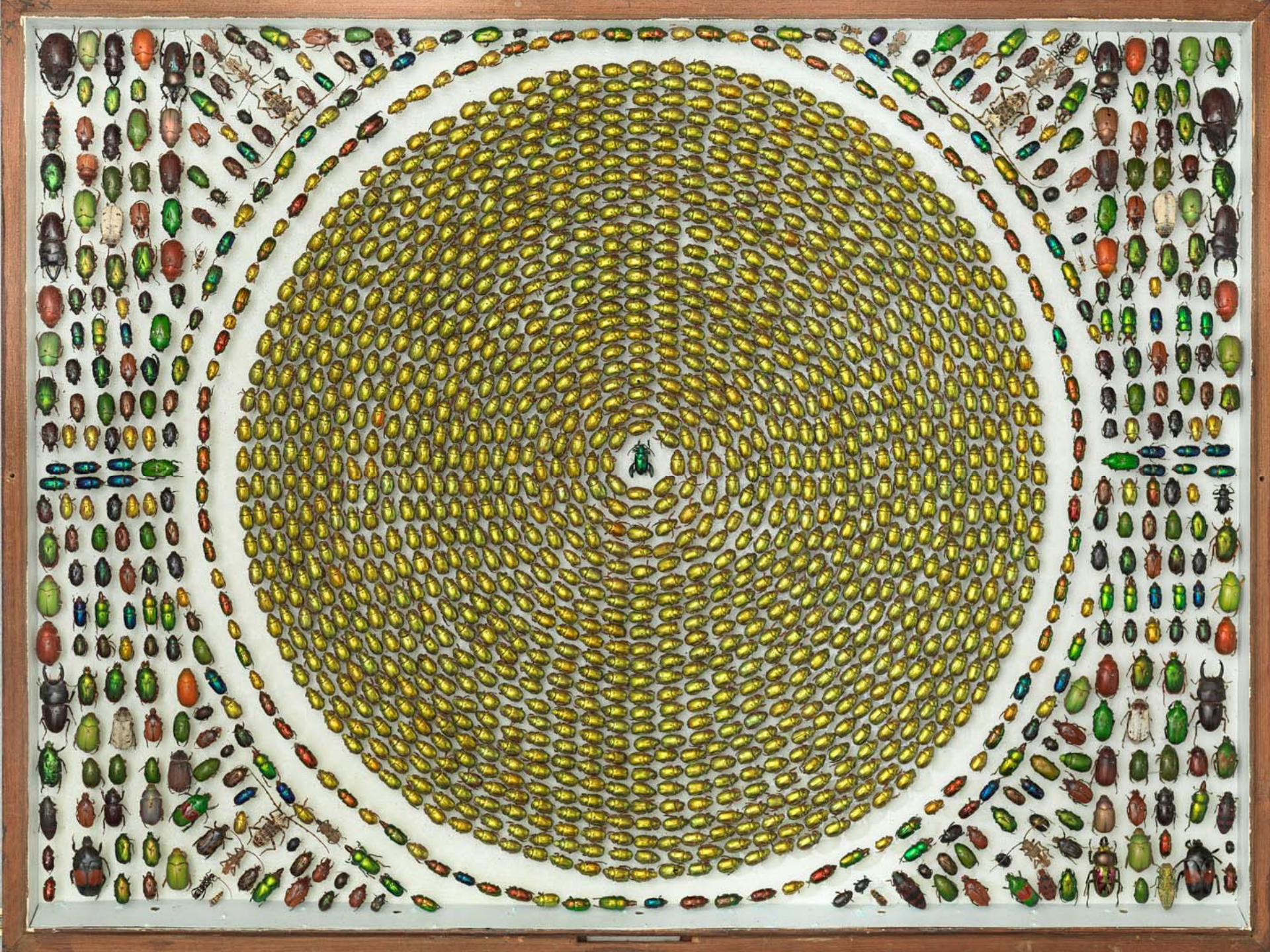
Hasselblad was upgraded to 200 MP

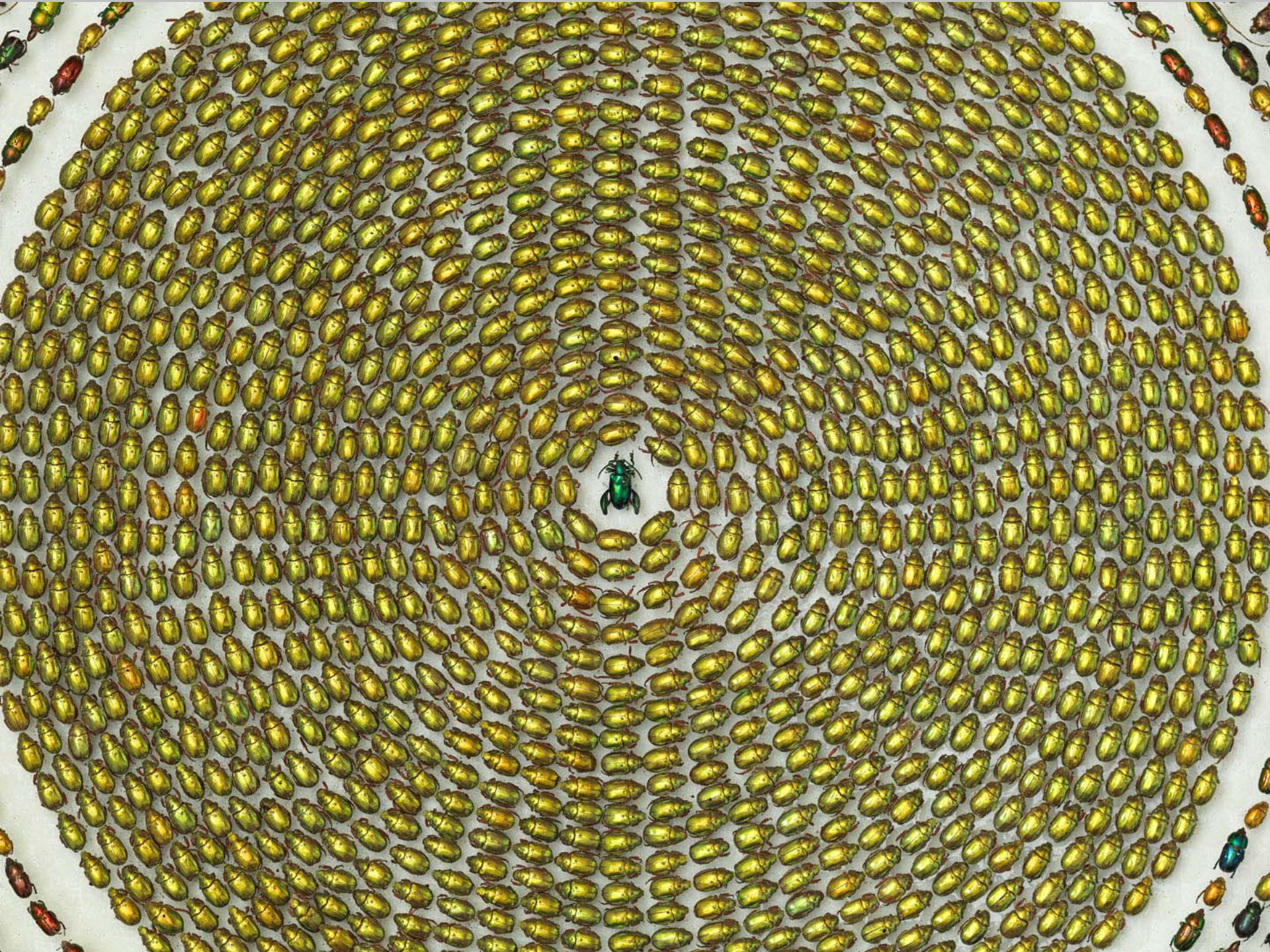
First project after upgrade to photograph historic Dodd cases

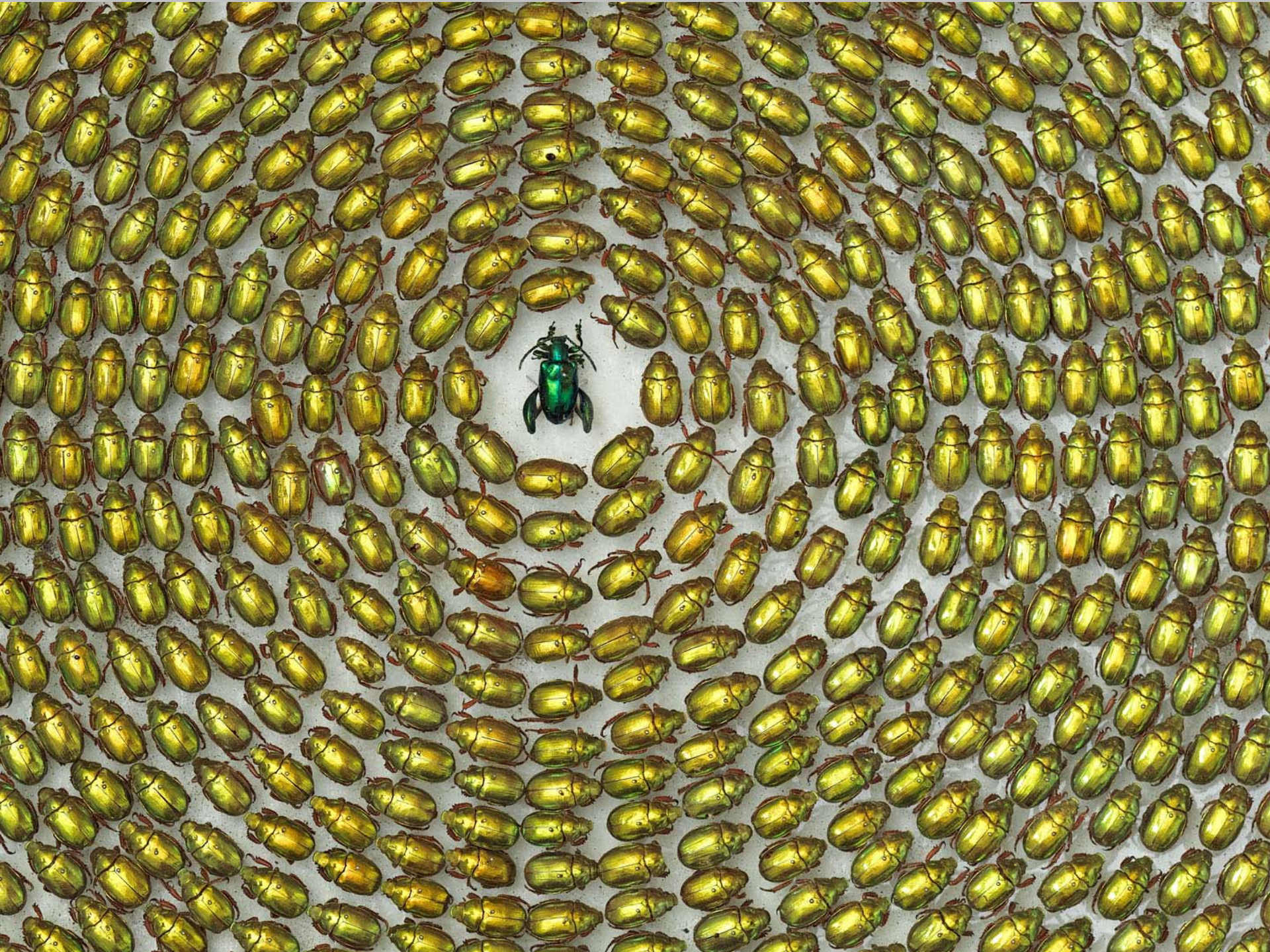
qm
queensland museum

qm
queensland museum

qm
queensland museum







qm
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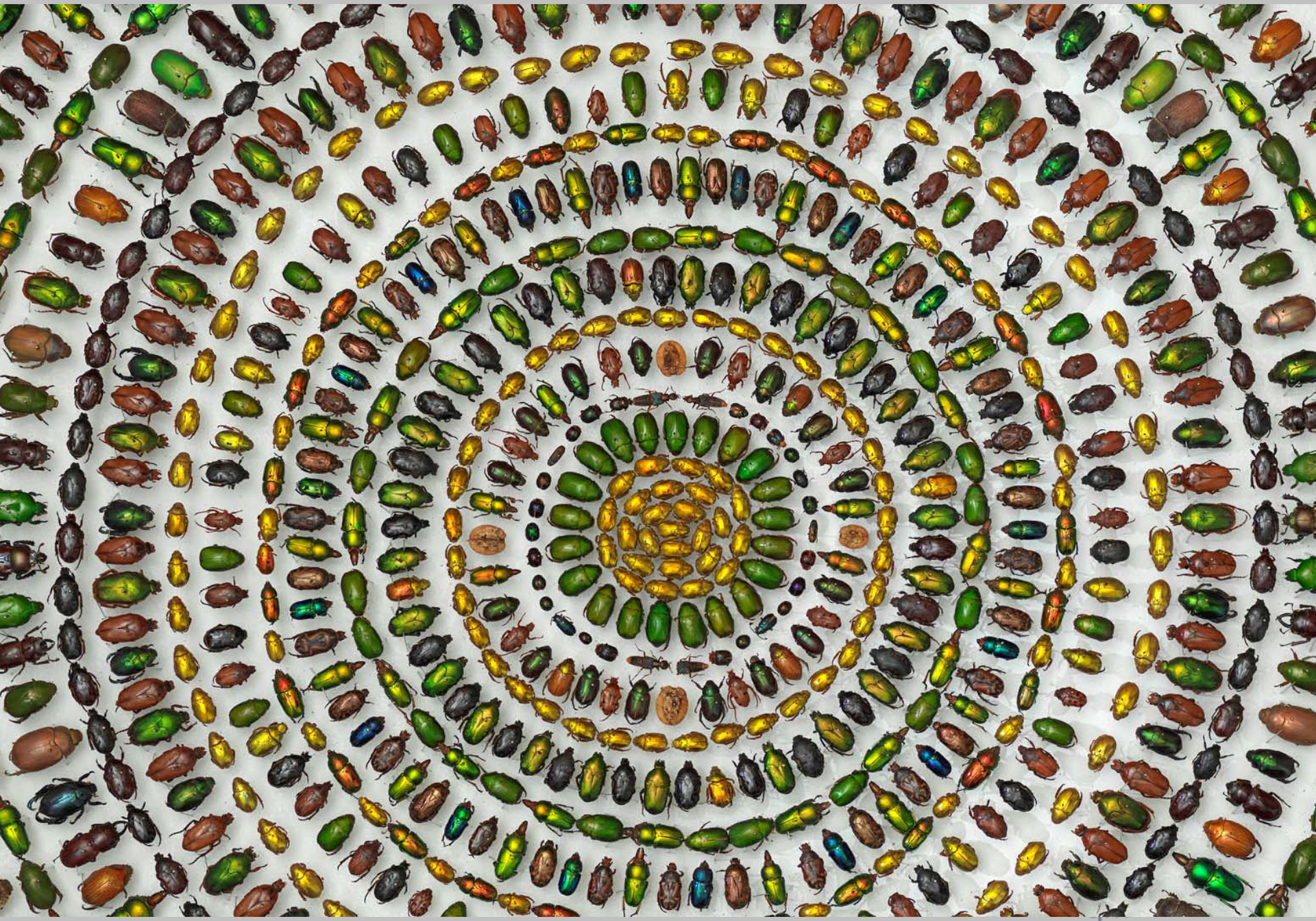

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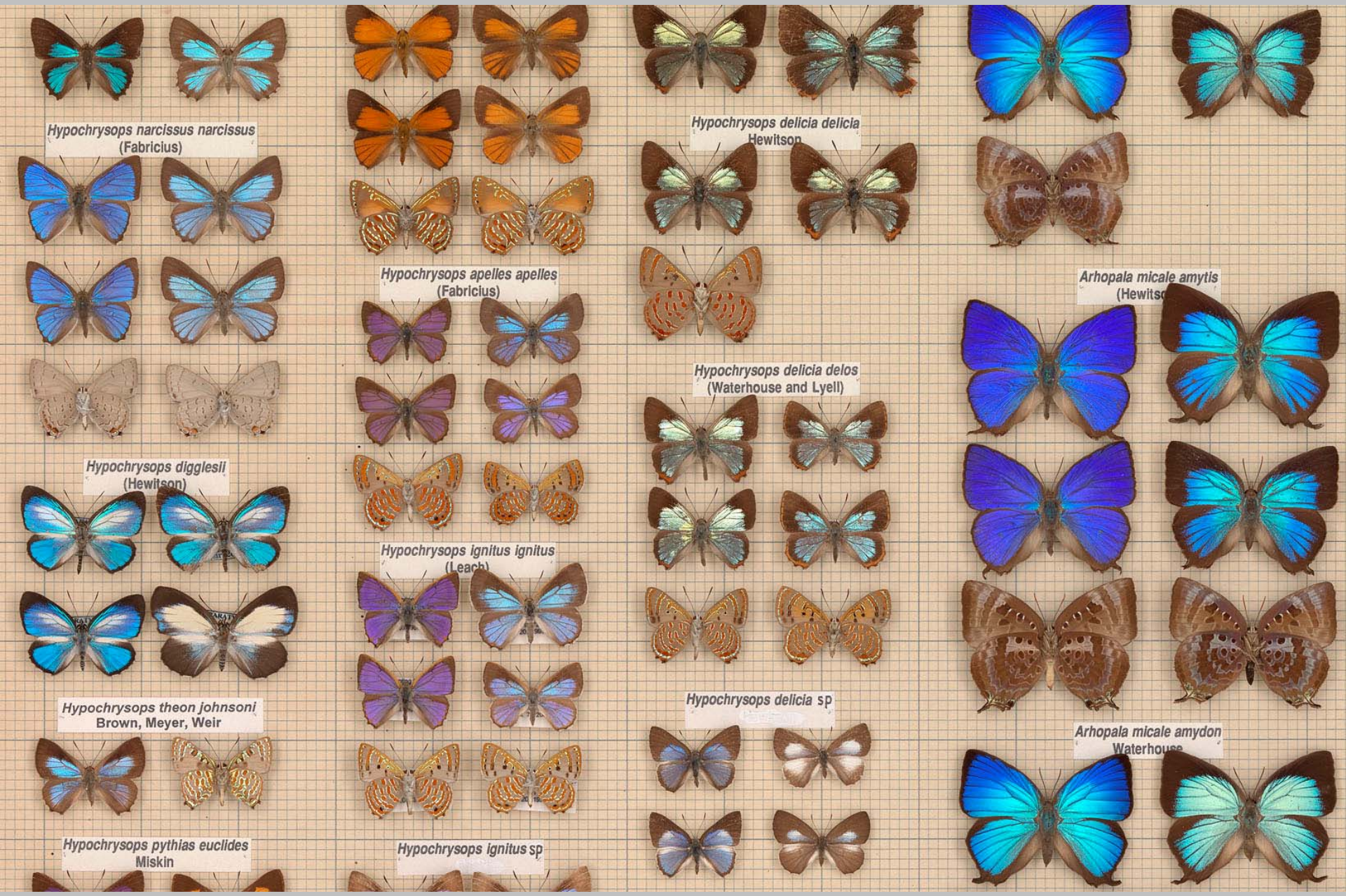
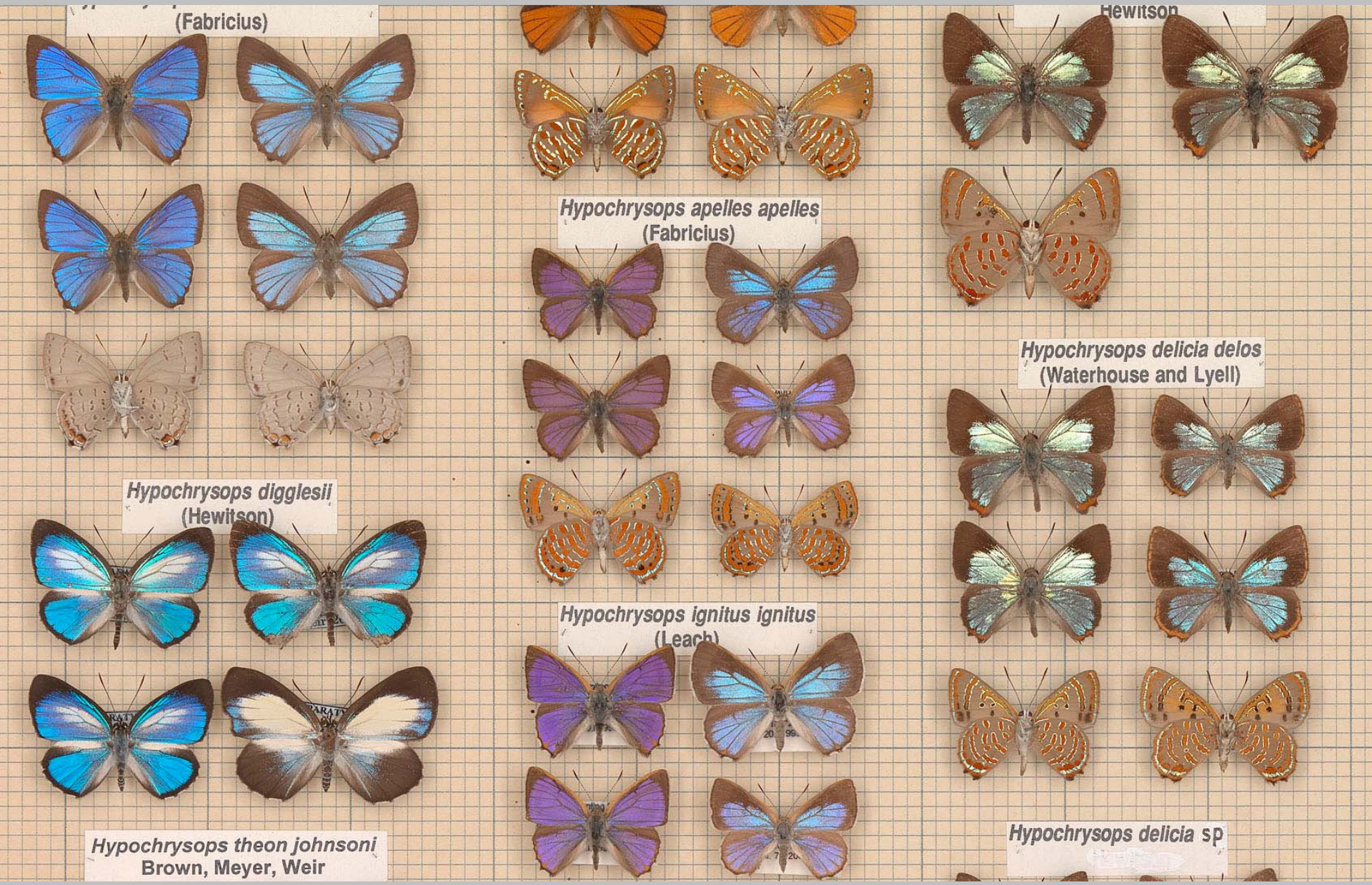
qm
queensland museum

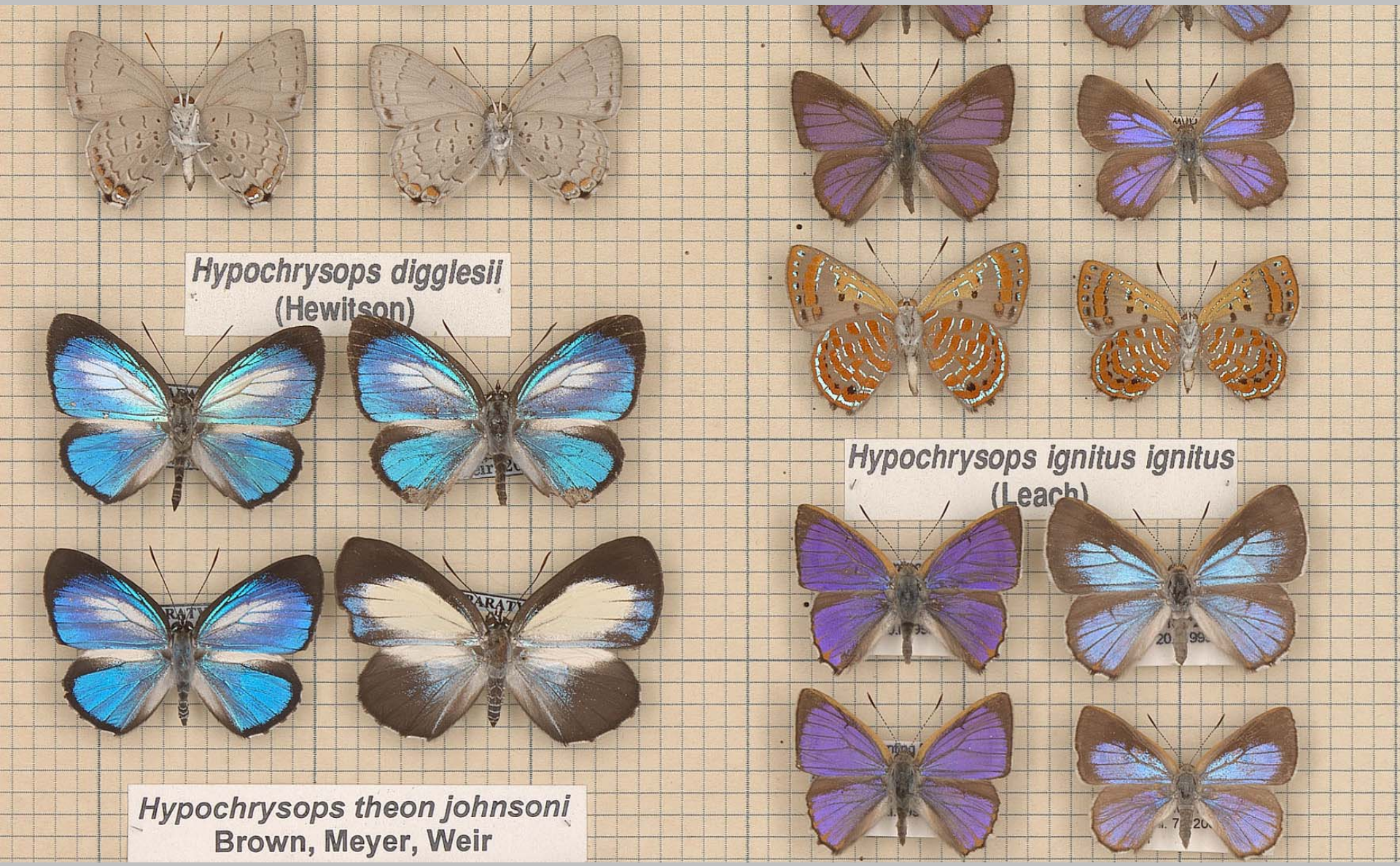
Hasselblad Drawer Photographs

- Hasselblad H4D-200MS can be used in 50 megapixel or 200 megapixel mode
- Volunteers have photographed 850 drawers

50-megapixel image from Knight collection


Hypochrysops narcissus narcissus
(Fabricius)
Hypochrysops digglesii
(Hewitson)
Hypochrysops theon johnsoni
Brown, Meyer, Weir
Hypochrysops pythias euclides
Miskin
Hypochrysops apelles apelles
(Fabricius)
Hypochrysops ignitus ignitus
(Leach)
Hypochrysops ignitus sp
Hypochrysops delicia delicia
Hewitson
Hypochrysops delicia delos
(Waterhouse and Lyell)
Hypochrysops delicia sp
Arhopala micale amytis
Arhopala micale amydon
Waterhouse


(Fabricius)
Hewitson
Hypochrysops apelles apelles
(Fabricius)
Hypochrysops delicia delos
(Waterhouse and Lyell)
Hypochrysops digglesii
(Hewitson)
Hypochrysops ignitus ignitus
(Leach)
Hypochrysops theon johnsoni
Brown, Meyer, Weir
Hypochrysops delicia sp



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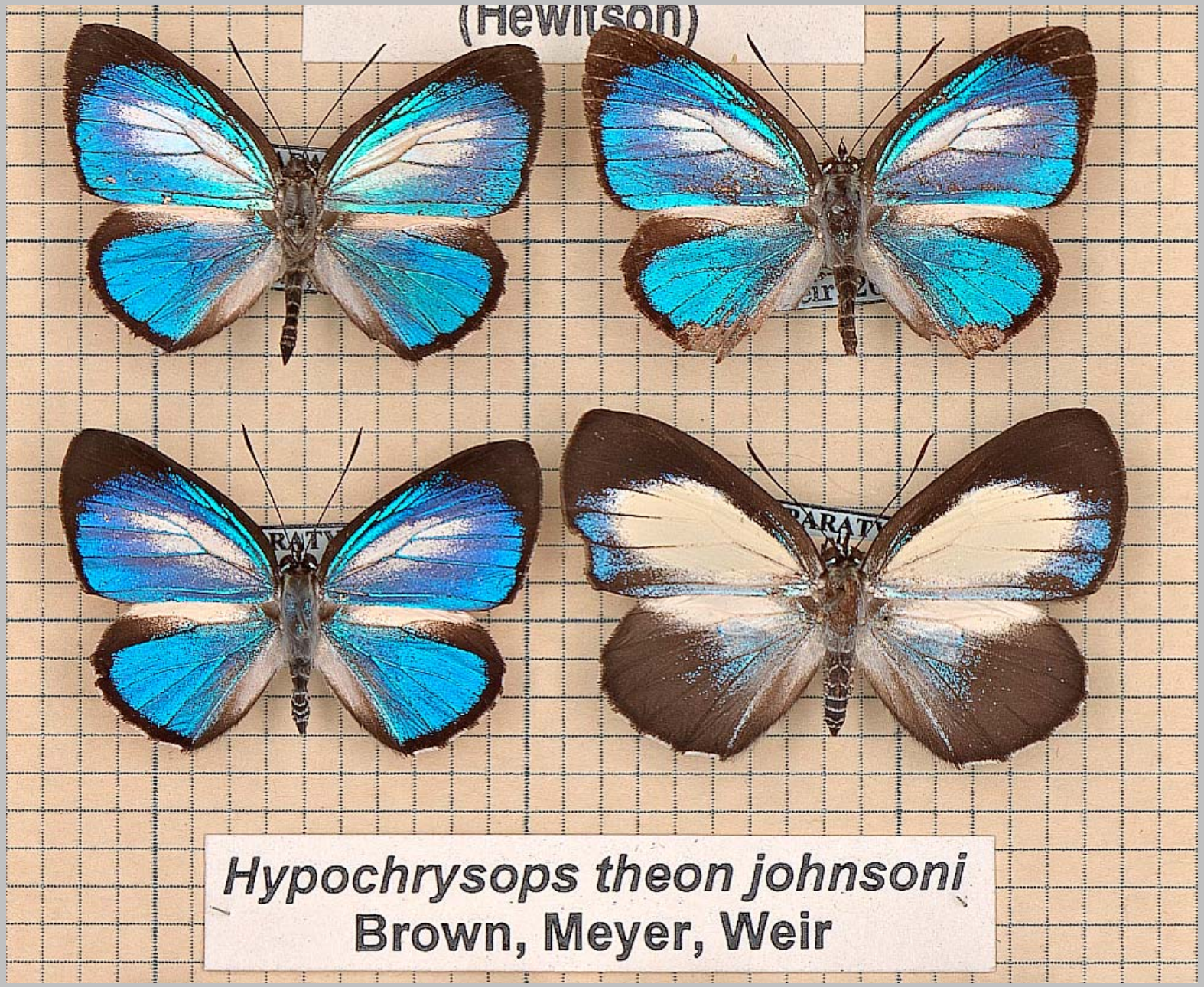
(Hewitson)
Hypochrysops theon johnsoni
Brown, Meyer, Weir

Paratype of *Hypochrysops theon johnsoni* photographed with the Hasselblad in 200 mp mode on the Visionary Digital BK-plus lab system, cropped and focus stacked from 12 source images with Zerene Stacker

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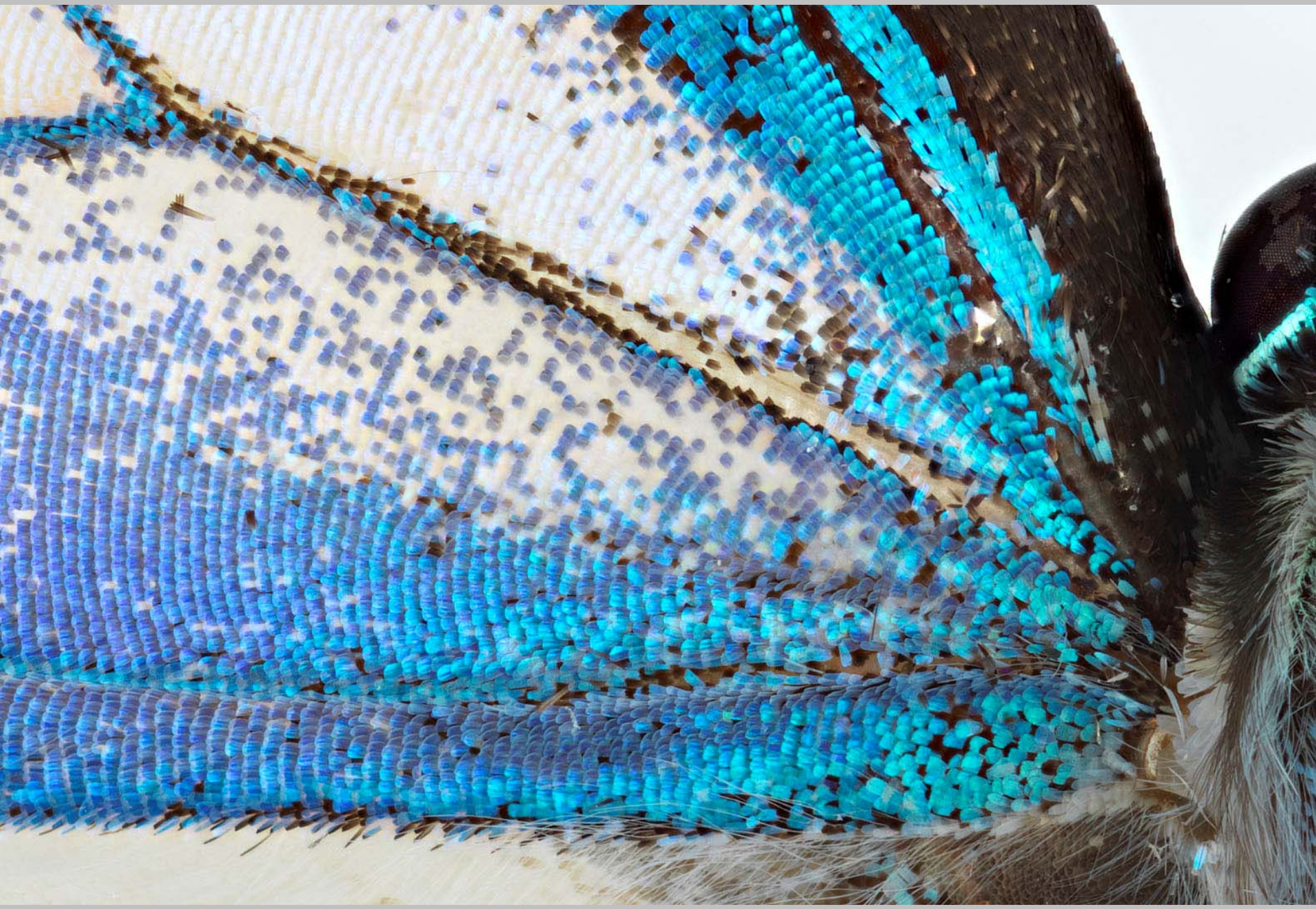

6-shot 200 megapixel image

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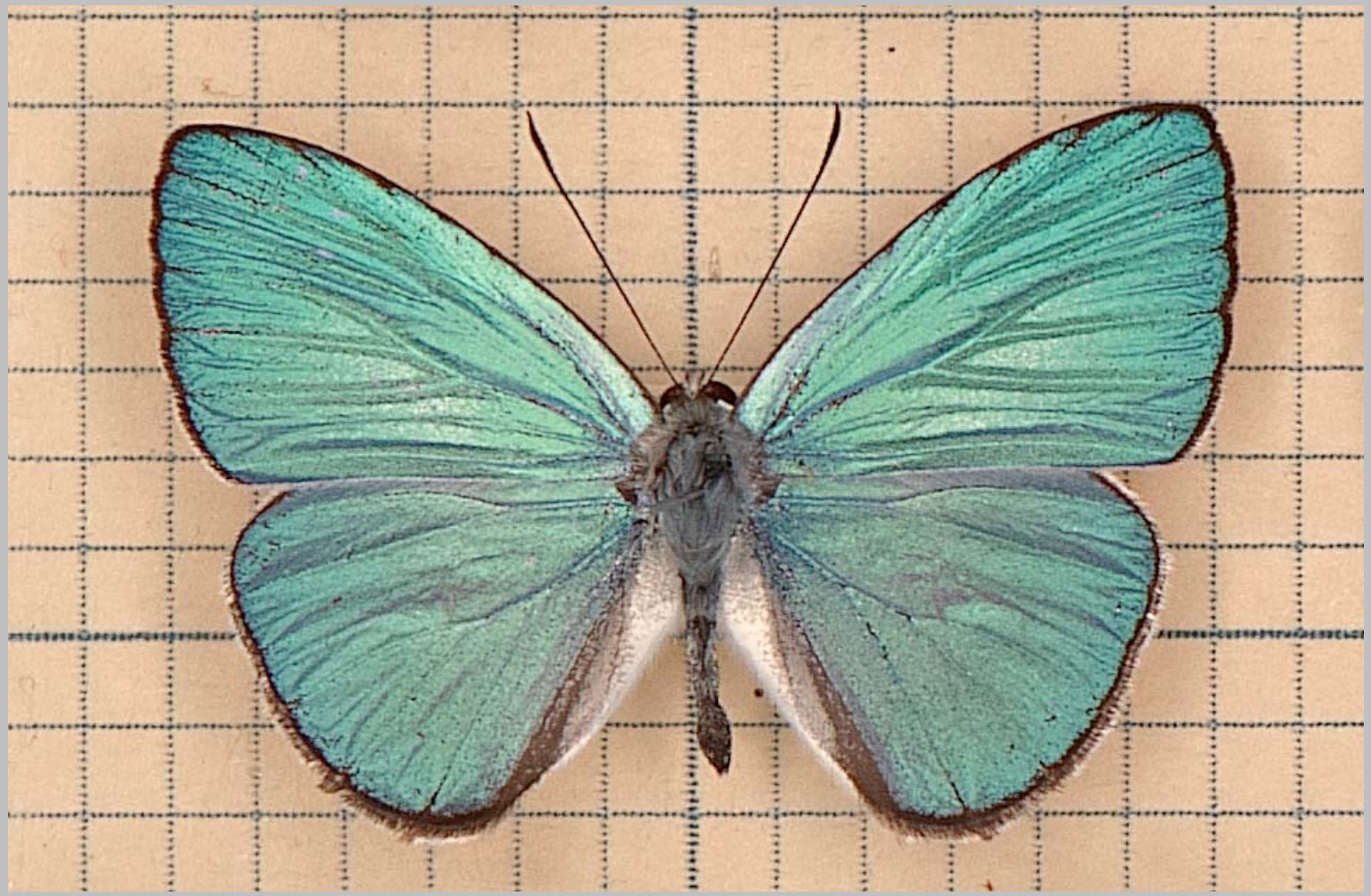

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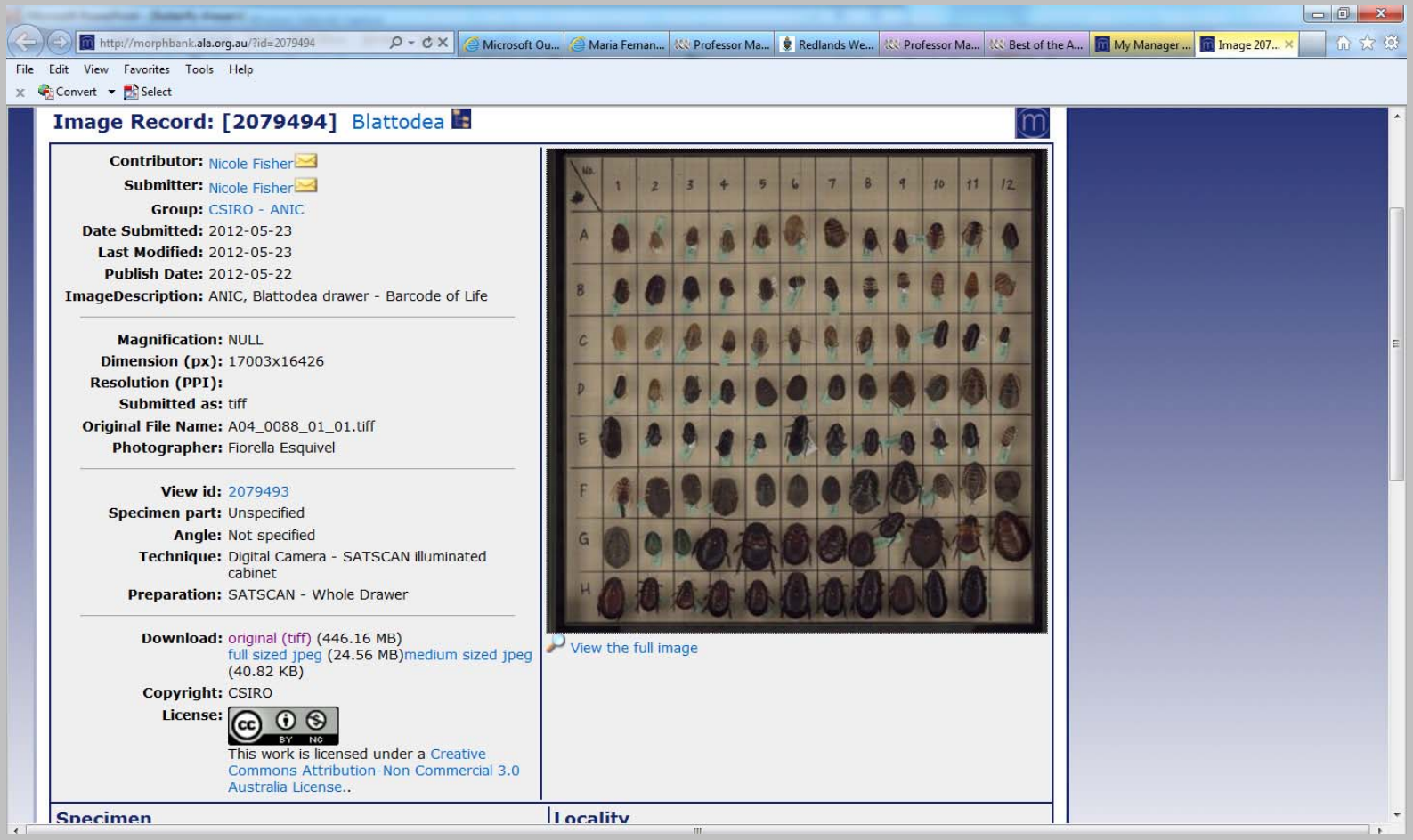
ALA should eventually upload Zoomified tiffs to Morphbank under family names



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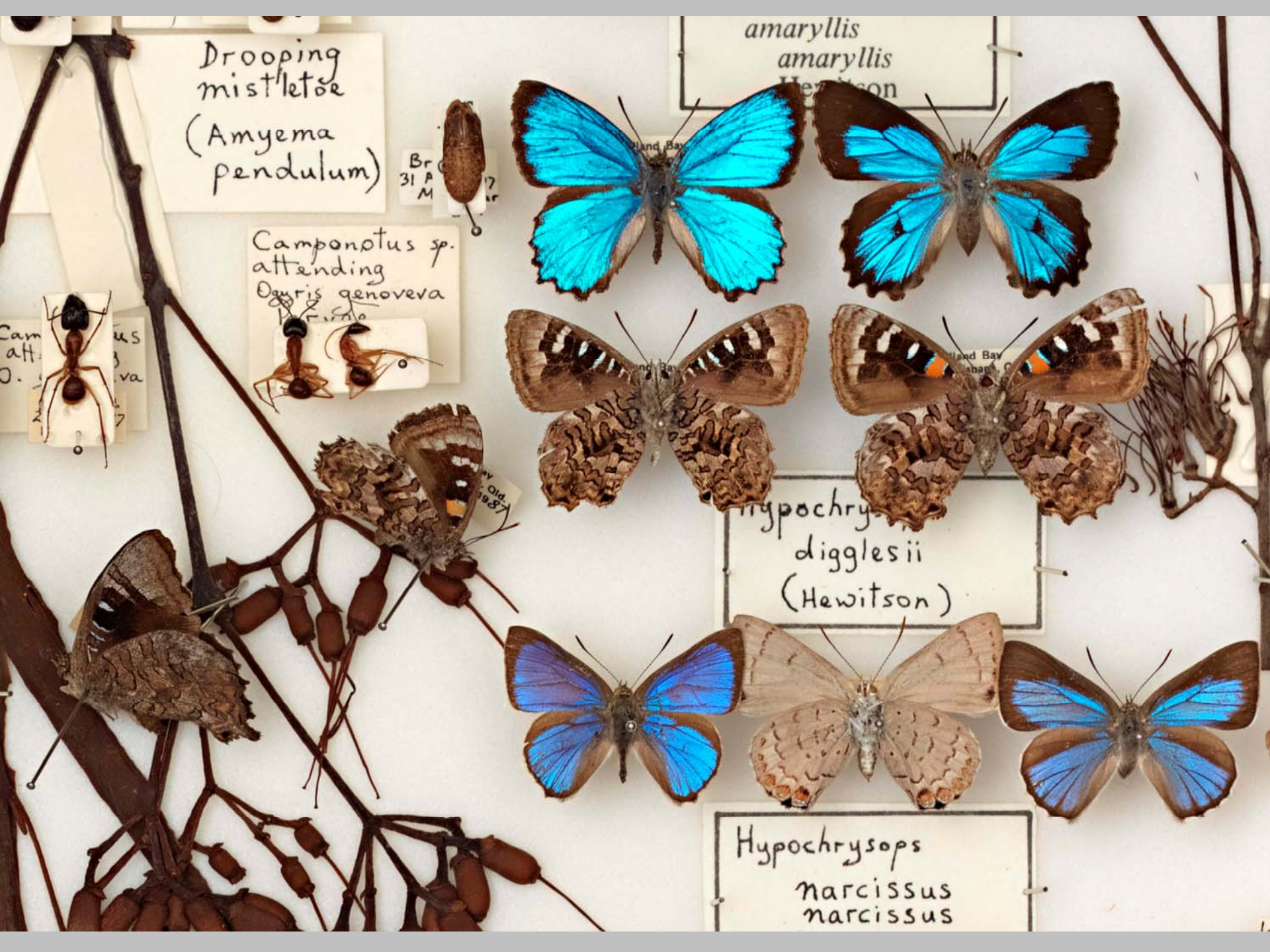
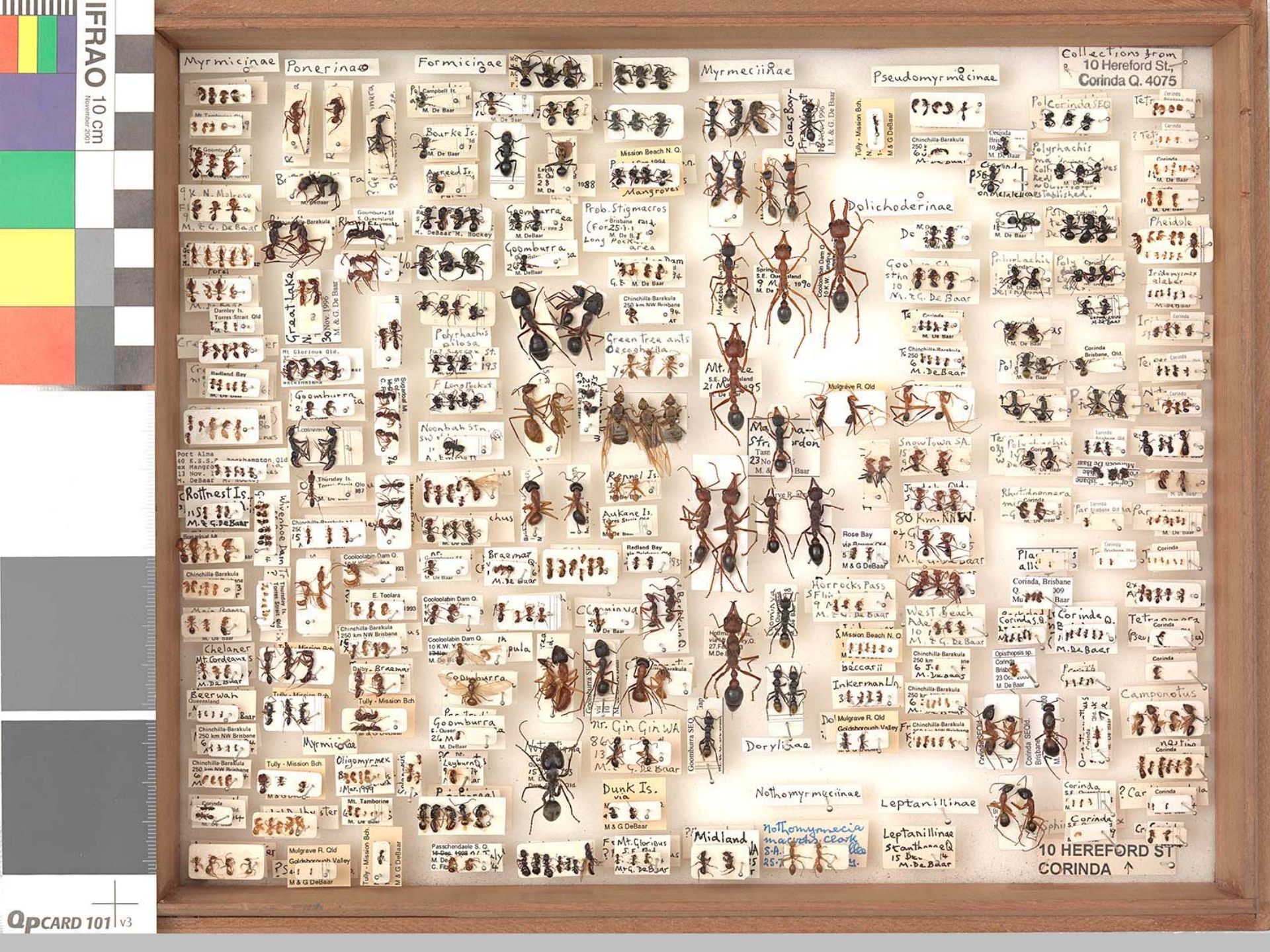
ANIC now using Flickr

Hasselblad - documenting donations


Drooping mistletoe
(Amyema pendulum)
Camponotus sp.
attending
Ogyris genoveva
amaryllis
amaryllis
diggles ii
(Hewitson)
Hypochrysops
narcissus
narcissus


Myrmicinae
Ponerinae
Formicinae
Myrmeciinae
Pseudomyrmecinae
Collections from
10 Hereford St,
Corinda Q. 4075
Dolichoderinae
Dorylinae
Nothomyrmeciinae
Leptanillinae
Myrmicinae
Great Lake
Rottnest Is.
Chelaner
Beerwah
Oligomyrmex
Dunk Is.
Midland
Nothomyrmecia
macrops Clark
10 HEREFORD ST
CORINDA

Green tree ants
Oecophylla
Mt.
S.E. Qu sland
21 Ma 95
M. De Baar
Mulgrave R. Qld
Rennel Is.
Aukane Is.
Redland Bay
Rose Bay
5
M & G DeBaar

Doli
Coolcoolbin Dam Q
10 K.W.
Kandina
90

SATURNIIDAE
Emperor, atlas, moon, comet, hercules moths
Comet moth
Argema mittrei
W5= 195 mm
HW length= 190 mm
Comet moth
Argema mittrei
W5= 200 mm
HW length= 120 mm
Atlas moth
Attacus atlas
Malaysia
Atlas moth
Attacus atlas
Malaysia
Opodiphthera eucalypti
NSW & NE. NSW
Emperor gum moth
Opodiphthera eucalypti
Eastern Australia
Opodiphthera eucalypti
Qld & NSW
Opodiphthera eucalypti
Qld & NSW
Syntherata cucullata
Cockroach to Brewon
Rcd 10 Dec 2006

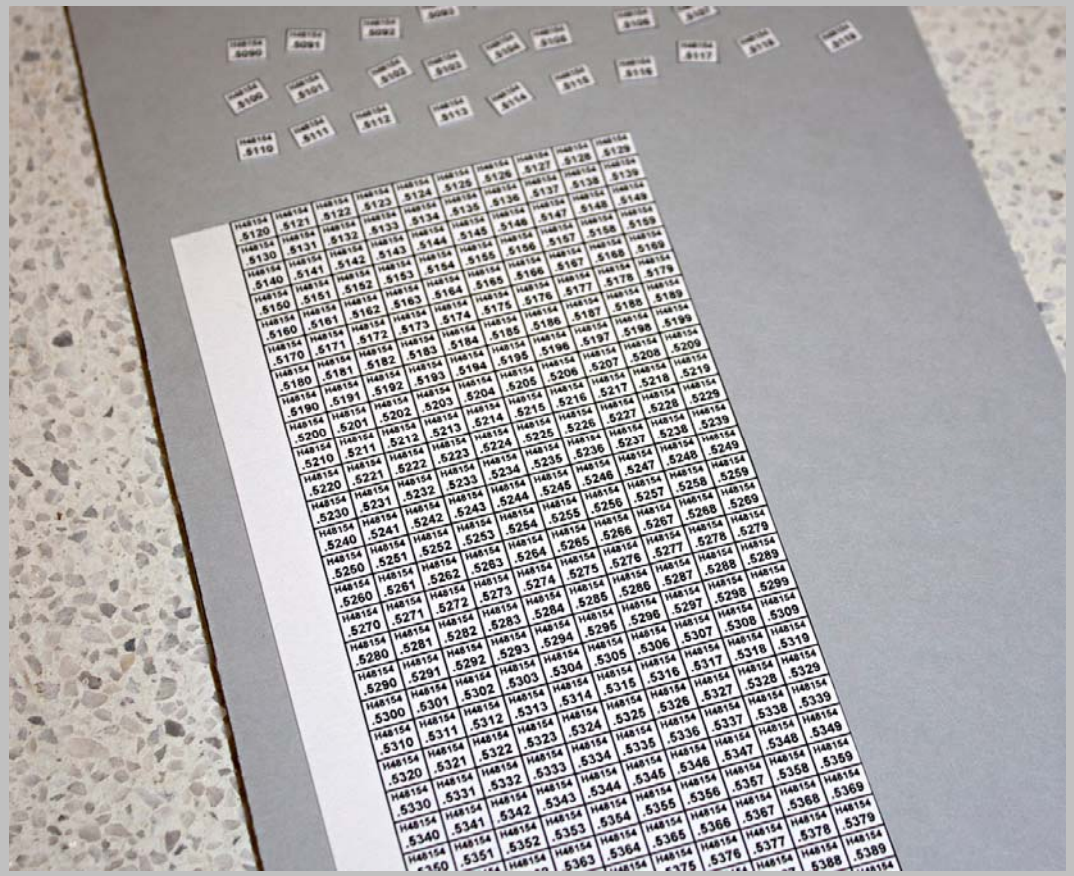
Comet moth
Argema mittrei ♀
WS= 200 mm
HW length= 120 mm

Photographing 8000 numbered pieces of Ancient Egyptian Book of the Dead

Used Hasselblad in 200 MP mode

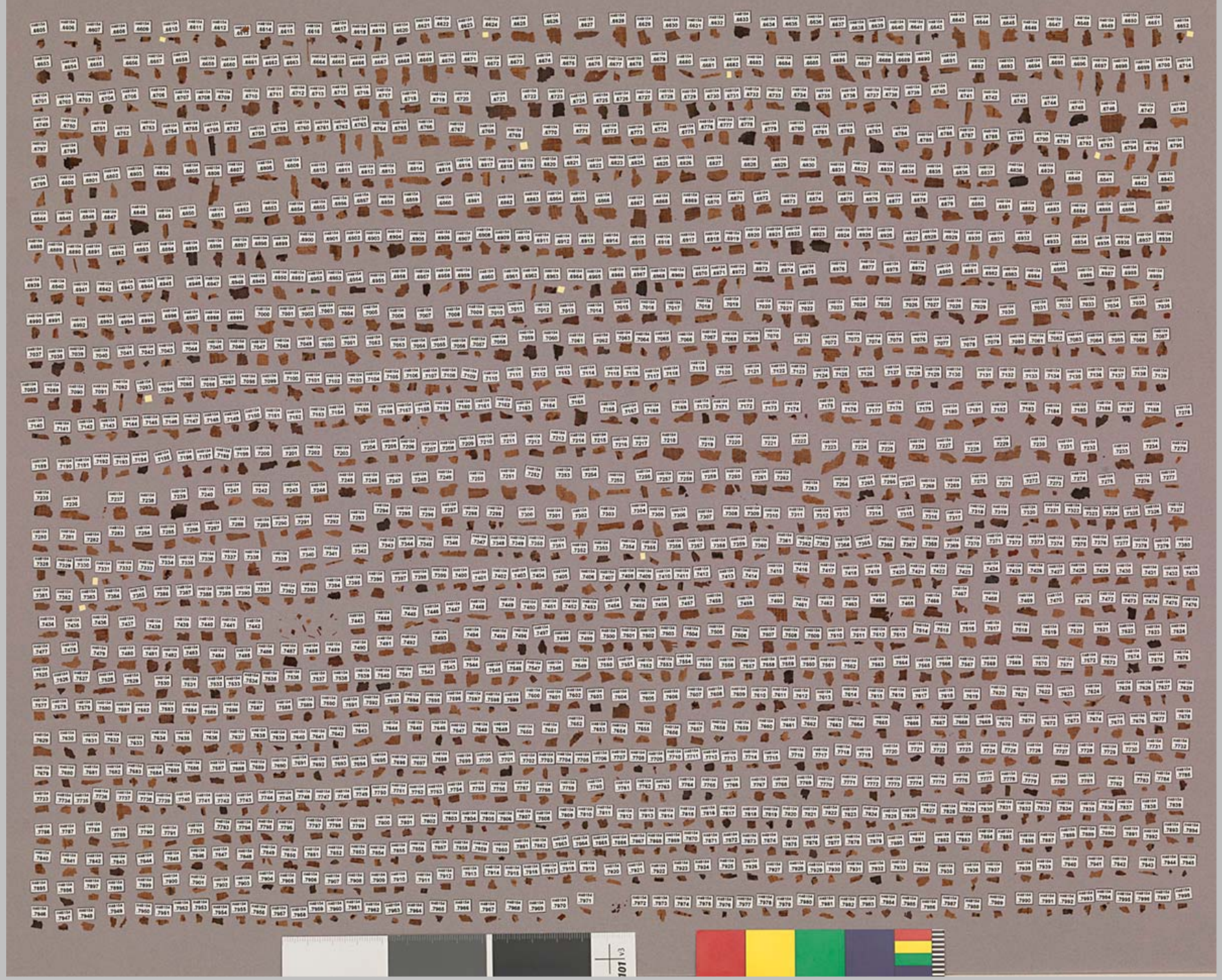
Had been stored in Mylar packets

Used entomological label style

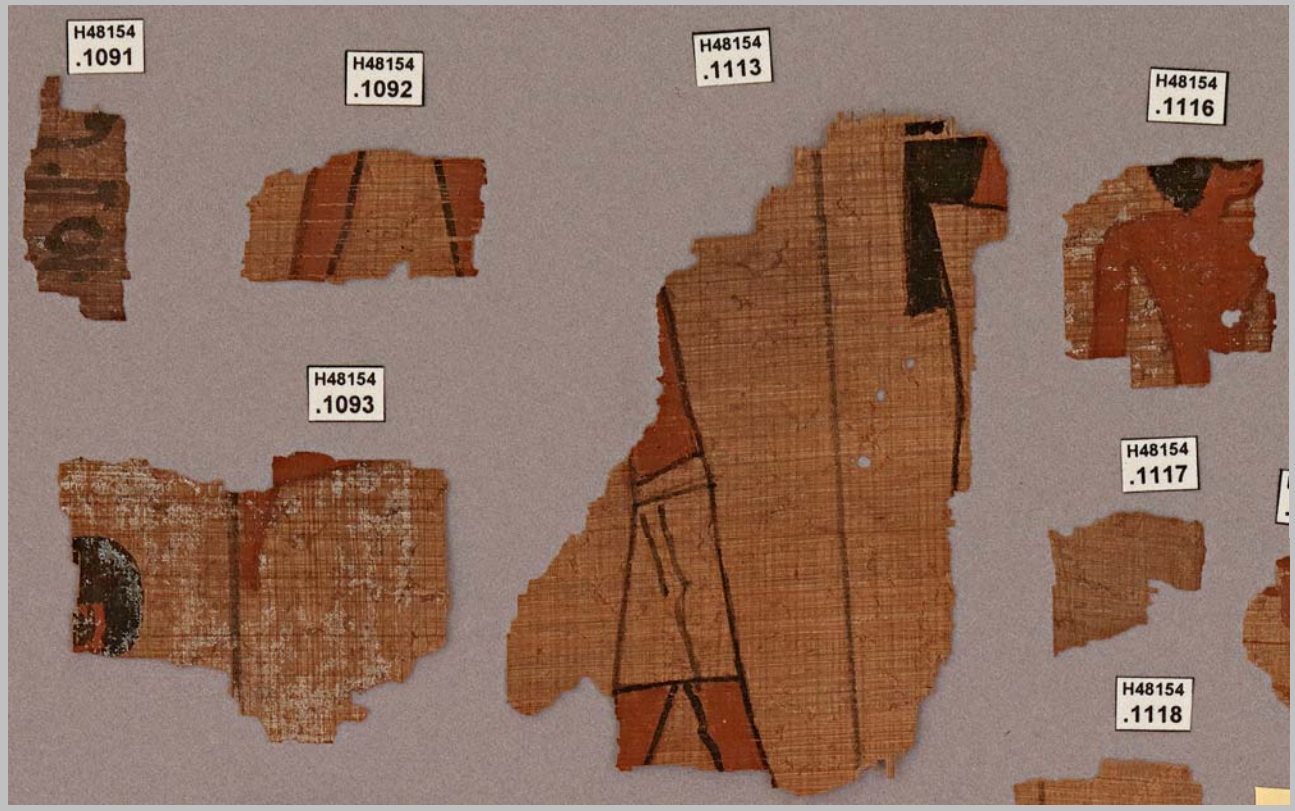


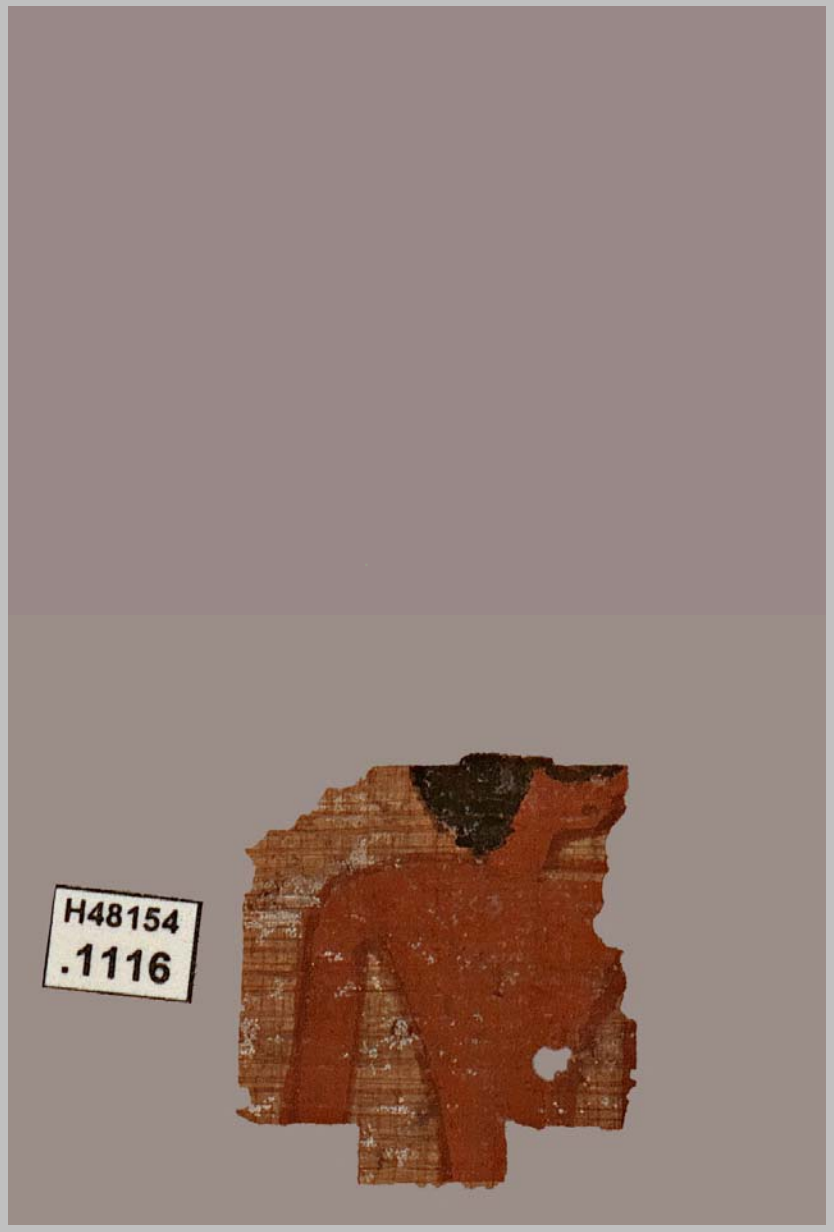
Had to check each piece for double sided images and mark those

IFRAO 10 cm
OPCARD 101



H48154
.0030


H48154
.1091
H48154
.1092
H48154
.1113
H48154
.1116
H48154
.1093
H48154
.1117
H48154
.1118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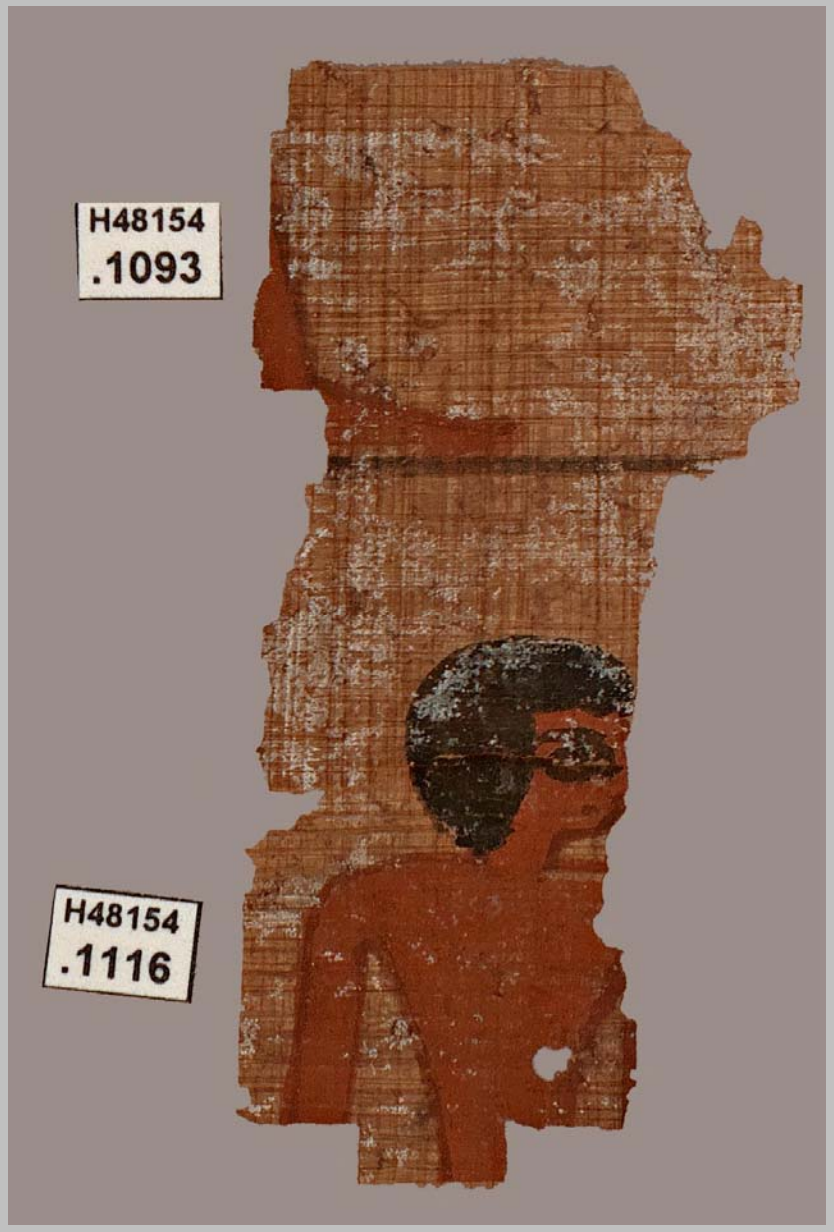
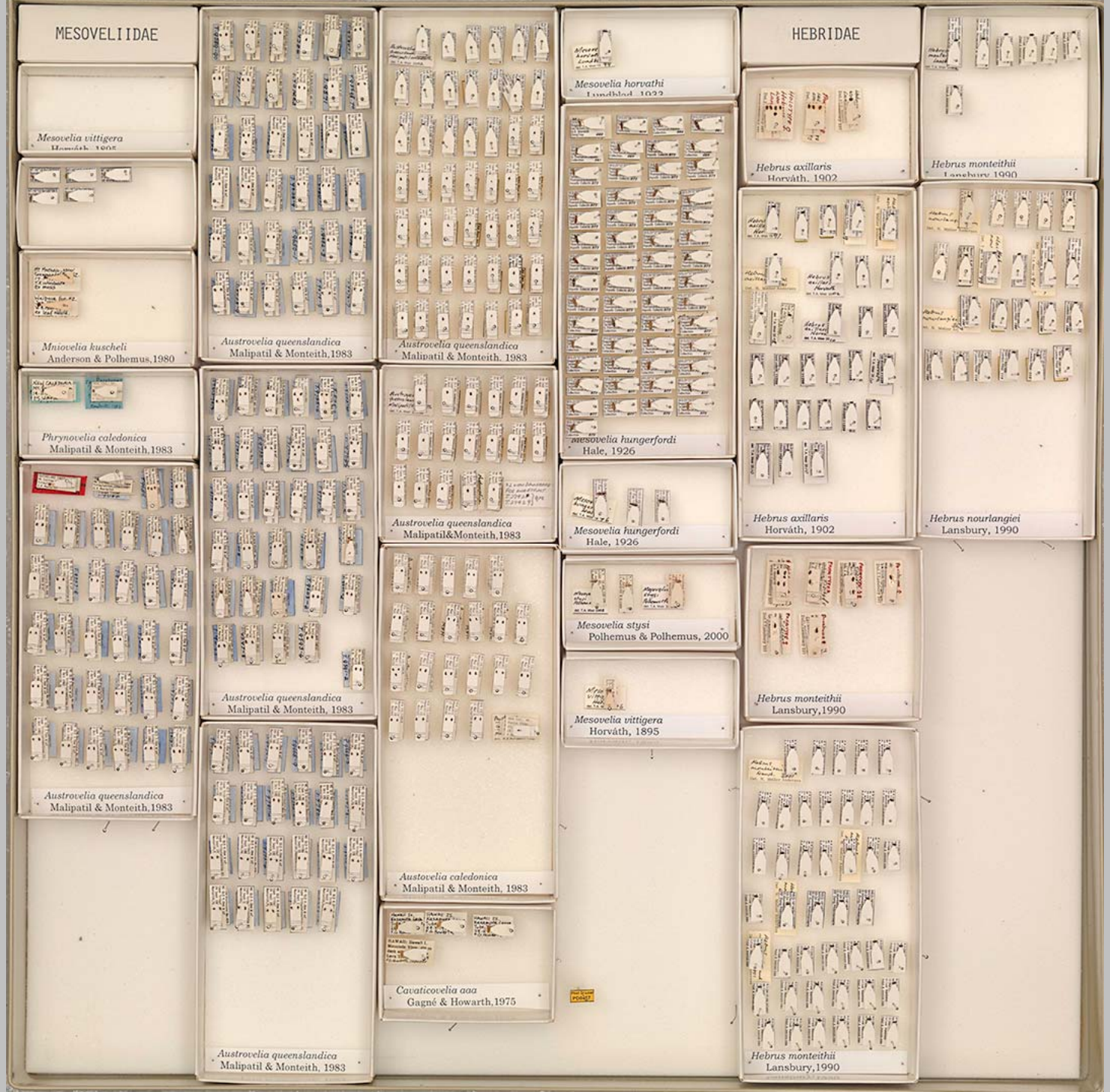
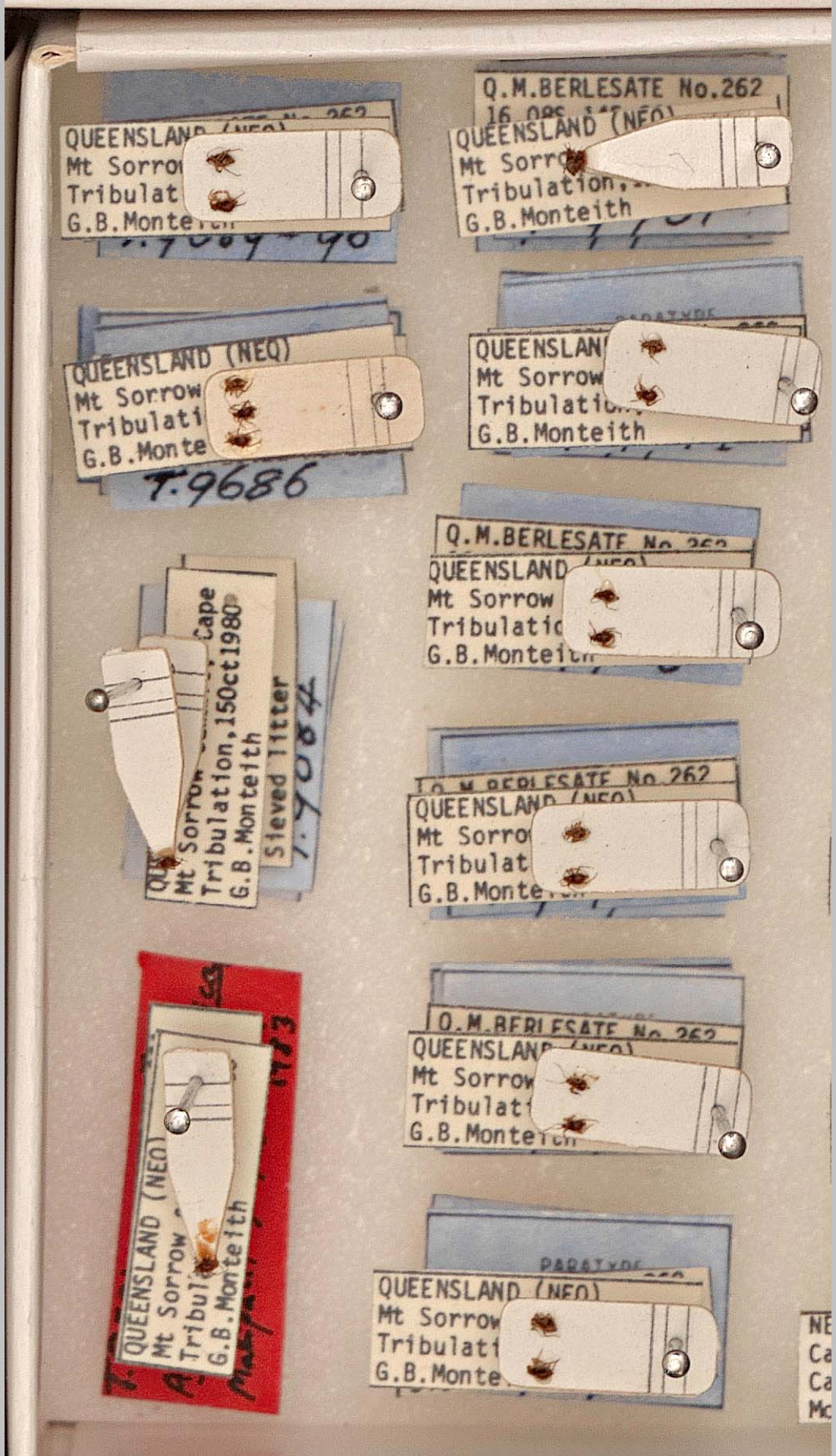

H48154
.1093
H48154
.1116


MESOVELIIDAE
Mesovelia vittigera
Mniovelia kuscheli
Anderson & Polhemus,1980
Austrovelia queenslandica
Malipatil & Monteith,1983
Austrovelia queenslandica
Malipatil & Monteith, 1983
Mesovelia horvathi
Hebrus axillaris
Horváth, 1902
Hebrus monteithii
Phrynovelia caledonica
Malipatil & Monteith,1983
Austrovelia queenslandica
Malipatil & Monteith,1983
Austrovelia queenslandica
Malipatil&Monteith,1983
mesovelia hungerfordi
Hale, 1926
Mesovelia hungerfordi
Hale, 1926
Hebrus axillaris
Horváth, 1902
Hebrus nourlangiei
Lansbury, 1990
Austrovelia queenslandica
Malipatil & Monteith,1983
Austrovelia queenslandica
Malipatil & Monteith, 1983
Mesovelia stysi
Polhemus & Polhemus, 2000
Mesovelia vittigera
Horváth, 1895
Hebrus monteithii
Lansbury,1990
Austovelia caledonica
Malipatil & Monteith, 1983
Cavaticovelia aaa
Gagné & Howarth,1975
Austrovelia queenslandica
Malipatil & Monteith, 1983
Hebrus monteithii
Lansbury,1990


Q.M.BERLESATE No.262
QUEENSLAND (NEQ)
Mt Sorrow
Tribulation,
G.B.Monteith
QUEENSLAND (NEQ)
Mt Sorrow
Tribulati
G.B.Monte
T.9686
Q.M.BERLESATE No.262
QUEENSLAND (NEQ)
Mt Sorrow
Tribulatio
G.B.Monteith
Mt Sorrow Cape
Tribulation,15Oct1980
G.B.Monteith
Sieved litter
T.9084
QUEENSLAND (NEQ)
Mt Sorrow
Tribulati
G.B.Monteith
QUEENSLAND (NEQ)
Mt Sorrow
Tribulati
G.B.Monteith
QUEENSLAND (NEQ)
Mt Sorrow
Tribulati
G.B.Monteith

Vibration errors apparent in some images at high magnification

Cystosoma schmeltzi
Distant, 1882

Austrogomphus heterogena
Austrogomphus heterogena
Austrogomphus heterogena
Austrogomphus heterogena
Austrogomphus heterogena
Xanthagrion Erythraeum
Hesperocordulia berneyi
Austrogomphus cornutus
Austrolestes aridus
Harpobittacus scheibeli
Harpobittacus scheibeli
Harpobittacus scheibeli
Pachymorpha nr.
Austrogomphus ictinomelas
Diplacodes bipunctata
Austrolestes io
Ischnura aspersa
Diplacodes bipunctata
Lestes concinnus
Illyria

When vibration absent individual insects can be cropped from whole drawer image and used