

# “Mini Ming” Pearls ahead: a challenge for Akoya?

## “迷你明珠”挑戰阿古屋(Akoya)養珠？

Prof. Dr Henry A. Hänni, SSEF Senior Research Associate

*h.a.haenni@gmail.com*

自從約2010年起於中國養殖，直徑15mm至20mm以上，在貽貝的性腺內培植的，業內稱為“明珠”的大顆優質淡水珠，被市場上視為南洋養殖珍珠的替代品。去年9月，作者欣賞了一批直徑7mm，亦在中國淡水養殖的，優質渾圓的“迷你明珠”。據業內消息，該批迷你明珠將於2019年批量面世，可能會對日本阿古屋(Akoya)養珠構成競爭。

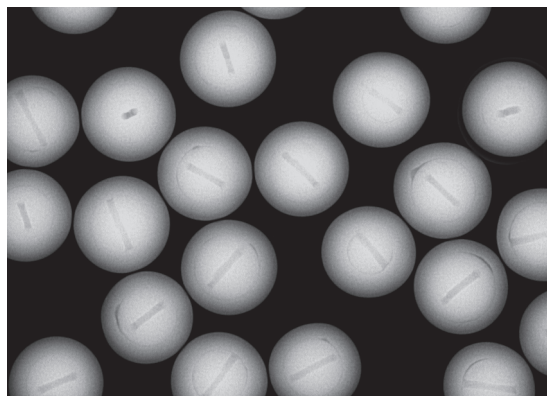
Some twenty years ago some Japanese cultured pearls reached the market that were special in two ways. First they were grown in the gonad of freshwater mussels and second they contained a shell bead. These so called “Kasumiga pearls” are internally characterised by two drill holes. The first one is in the bead when the shell is nucleated, and later a second hole that is drilled though the finished product. Production in Japan stopped however because the water quality fell off and the quantity decreased.

Since about 2010, Chinese pearl farmers have been growing similar pearls. These Chinese gonad-grown cultured pearls from freshwater mussels are called “Edison pearls” or “Ming-pearls”, probably an allusion to the Chinese Ming Dynasty, due to their important size and beauty. The shell that is used for those pearls is also a hybrid between *Hyriopsis Schlegeli* and *Hyriopsis Cumingii*. With diameters from an impressive 15 to over 20mm they have gained world-wide interest and admiration and are a serious alternative to South Sea cultured pearls when bleached to white (Hänni, 2011).

In September 2017 the author was able to admire a number of small “Ming” pearl, cultured pearls of 7mm at the Hong Kong Jewellery Show. The pearls showed the pastel colours seen in *Hyriopsis* shells and are perfectly round as they were nucleated with a 5mm bead (Fig. 1). Cross sections and x-ray pictures (Fig. 2) revealed that they too had a drilled bead nucleus as the large “Ming” pearls do (Fig. 3). According to Johnny Chan, former president of the



**Fig. 1** A strand of Chinese mantle-grown beaded freshwater cultured pearls. The natural coloured pearls have diameters of 7mm and are called “Mini Ming”. Photo © H.A.Hänni @SSEF 一串於貽貝殼幔養殖的中國淡水養珠。此串天然色彩的養珠直徑為7毫米，由於它們的質量與被業內稱為“明珠”的淡水養珠相似，因而被稱為“迷你明珠”。



**Fig. 2** X-ray shadow graphs of “Mini Ming” cultured pearls (Ø 7mm average) with drill holes only in the bead nuclei (Ø 5mm average). Radiograph by SSEF Swiss Gemmological Institute, Basel (Switzerland). 平均直徑7毫米的“迷你養殖明珠”的X射線陰影圖，其僅在平均直徑5mm的珠核中具有鑽孔。

Hong Kong Pearl Association and owner of Sea Pearl (Hong Kong), the “Ming pearls” are produced in the provinces south of Wuhan where there are many lakes. “Mini Ming pearls” grow in the mantle of the same shells that are used for breeding maxi “Ming” in the gonad. The gonad nucleation is performed on one-year-old mussels. At 2.5 years of age six 5mm round shell beads are inserted into the mantle of both wings of the mussel. At 4 years of age the pearls are harvested. The result



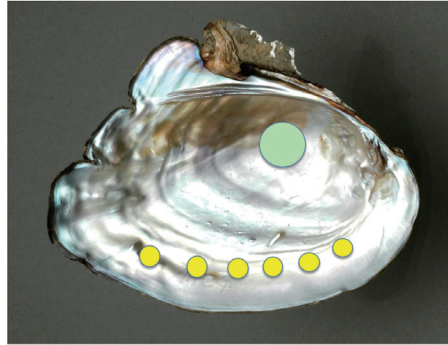
**Fig. 3** A group of “Mini Ming” freshwater cultured pearls, the examples that have been cut open display the drilled beads whereas the pearls themselves are not drilled. Diameter of the shell beads is 5mm, thickness of the nacre layer precipitated during 18 months is 1mm. *Photo © H.A.Hänni @SSEF*

一批淡水養殖的“迷你明珠”，剖開的樣本顯示珠核具鑽孔，而珍珠本身沒有鑽孔。殼珠珠核的直徑為5mm，而經18個月培植的珍珠層厚度為1mm。

is usually one big “Ming pearl” and 12 “Mini Ming” per shell (Fig. 4). The thickness of the nacre layer precipitated over 18 months is 1mm.

The first large production will be ready in 2019. It is expected that most of the originally pastel colour 7mm pearls will be drilled and bleached white. They will then form an impressive competition to Japanese saltwater beaded cultured pearls as an alternative to Akoyas of similar diameters.

Large Ming  - Mini Ming 



Position in the mussel

**Fig. 4** Hyriopsis mussel with systematic sketch showing where the larger gonad grown “Ming pearl” (green) grows, in comparison to 6 mantle grown mini “Ming pearls”.

*Photo © H.A.Hänni @SSEF*

以上草圖顯示了於三角帆蚌貽貝性腺生長的“明珠”（綠色），與六顆殼幔生長的“迷你明珠”生長位置比較。

#### References

Hänni, H.A., (2011) Ming Pearls: A new type of cultured pearls from China. *J.Gemmol. Assoc.Hong Kong*, XXXII, 23-25

Strack, E. (2006): Pearls. Rühle-Diebener-Verlag, Stuttgart

Southgate, P.C. & Lucas, J.S. (2008) *The Pearl Oyster*.- Elsevier, ISBN -13: 978-0-44-452976-3



VALUATION SERVICES

**Joanne Chan, FGAHK, CG, FGA, GG  
Gemmologist**

**Jewellery Valuations  
Gem Testing  
Diamond Grading**

For more information, please call 2869 4350