

Addendum to the SSEF Keshi cultured pearl trade alert: May 2010 ... and what happens with the beaded cultured pearls ?

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Following our recent press release on beadless cultured pearls (also called "Keshi" in the trade, see www.ssef.ch/en/news/news_pdf/newsletter_pearl_2010May.pdf), we received many positive reactions from the trade.

As there were also questions about beaded cultured pearls, we would like to inform the trade, that developments in pearl cultivation is not only restricted to the beadless cultured pearls ("Keshi"), but also includes the use of **new bead materials** in beaded cultured pearls.

We have encountered so far the following "new" beads, especially used for pearl cultivation in *Pinctada maxima* (Silverlipped and Goldlipped pearl oyster):

1) **Beadless saltwater cultured pearl ("Keshi")** used as a **bead** to produce a cultured pearl.

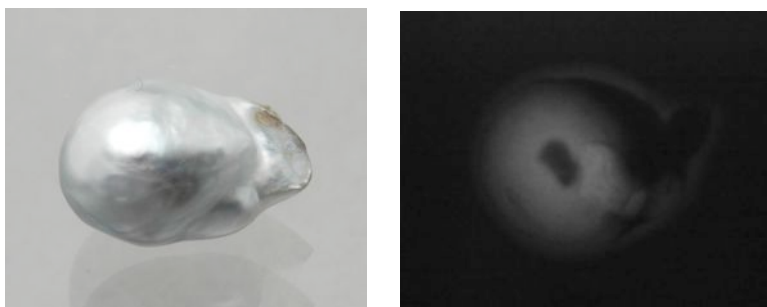


Fig. 1: Photo and radiography of a cultured pearl with a beadless saltwater cultured pearl ("Keshi") used as a bead. © M.S. Krzemnicki, Swiss Gemmological Institute SSEF

2) **Beadless freshwater cultured pearl** from China used as a **bead** of a cultured pearl.

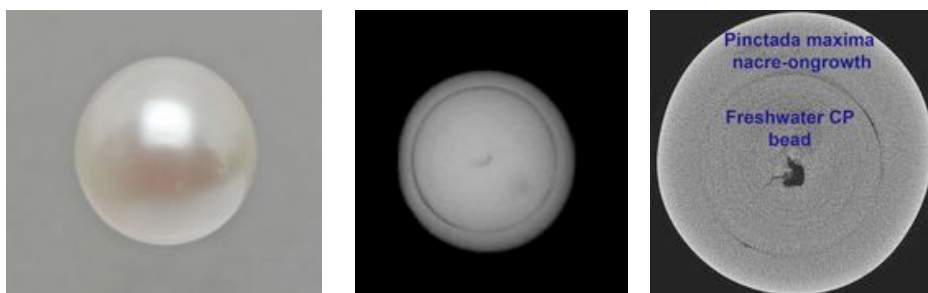


Fig. 2: Photo, radiography and micro X-ray tomography of a cultured pearl with a beadless freshwater cultured pearl (Chinese) used as a bead. © H.A. Hänni, Swiss Gemmological Institute SSEF

3) Beaded saltwater cultured pearl used as a **bead** of a cultured pearl

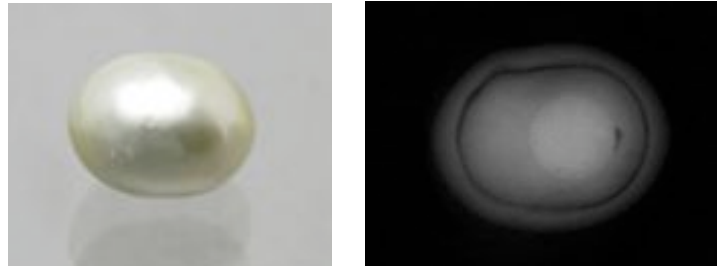


Fig. 3: Photo and radiography of a cultured pearl with a beaded saltwater cultured pearl used as a bead.
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and most recently,

4) Natural saltwater pearl used as a **bead** of a cultured pearl

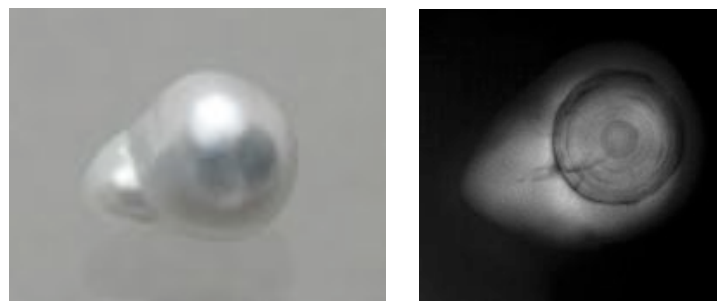


Fig. 4: Photo and radiography of a cultured pearl with a natural pearl used as a bead.
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Why new beads are used?

These last developments show, that there are some individuals who purposely try to produce cultured pearls with internal structures to be confused with natural pearls. Again, as for the beadless cultured pearls (“Keshi”), most of these pearls come with reports as natural pearls. However, we can say, that they are certainly only in a very limited amount on the market, contrary to the beadless cultured pearls (“Keshi”) described in our last press release. But this may change in future.

SSEF identifies these pearls as beaded cultured pearls

The SSEF has been investigating these beaded cultured pearls for some time in detail (see Hänni, Krzemnicki & Cartier *in the upcoming issues of the Journal of Gemmology and Zeitschrift der Deutschen Gemmologischen Gesellschaft*).

Our research revealed some intriguing external features, which in combination with radiography and micro X-ray tomography enable us to distinguish these cultured pearls with “new” beads from their natural counterparts.

To face these and future challenges in pearl identification, the SSEF is investing much effort in pearl research. By constantly adapting its analytical methods accordingly and by regularly communicating its results to the trade and gemmological laboratories, we are confident that we are taking all necessary measures to protect the natural pearl trade as far as possible.

To learn more about these issues, the SSEF offers a highly specialized pearl course, where you learn in detail how natural pearls and cultured pearls are forming and how they can be separated from each other using all current analytical tools, including radiography and micro X-ray tomography. For any further information, see our website www.ssef.ch or contact SSEF at gemlab@ssef.ch or by phone +41 61 262 06 40.

References:

Hänni, H.A., Krzemnicki, M.S., Cartier, L. (2010) Perlen mit neuem Kernmaterial. *Zeitsch. Deutschen Gemm. Gesellschaft, Vol. 59, Issue 1 / 2 (in press)*

Hänni, H.A., Krzemnicki, M.S., Cartier, L. (2010) Appearance of new bead material in cultured pearls. *Journal of Gemmology, Vol. 32, Issue 1-4 (in press)* and *short communication in Gems & Jewellery, Vol. 19, No. 2 (in press)*