

## **South Sea Pearls Produced by, *Pinctada maxima*, Oysters from an Indonesian Hatchery**

R.A.Rose, M.M. Mannion, M. Bell, L.J. Ryan, R.D. Hillbrick, R.J. Leslie-Rose

Pearl Oyster Propagators P/L 8 Kelat Court, Bayview, Northern Territory, 0820 Australia.

---

### **Abstract**

An Indonesian pearl farm, involving a joint venture between Indonesians, Japanese, Swiss and Australians, has harvested and auctioned three crops since its conception 7.5 years ago. The oysters cultivated were produced in a hatchery located on a farm in the southern region of the Halmahera Island group, northern Maluku Province, Indonesia.

Natural and cultured pearls are sold by weight. The price depends on a variety of attributes (e.g. size, weight, colour, shape, lustre, orient and complexion). The venture to date has sold in excess of 200kg of cultured, nucleated pearls from oysters only operated on for the first time. The project has not yet harvested a crop of pearls from oysters which have been seeded for a second or third time.

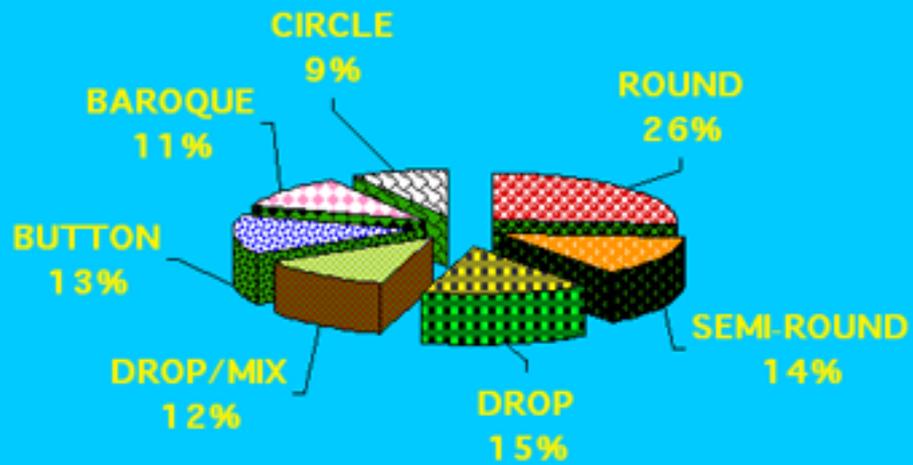
The largest harvest to date weighed 125kg which produced 47 355 pieces averaging 2.64g/piece. The percentages of pearls by colour were as follows: 37% silver; 32% yellow; 13% cream; 9% gold; 7% mixed (all other colours); and 2% silver/blue. The percentages by shape were: 26% round; 14% semi-round; 27% drop (pear shaped); 13% button; 11% baroque (irregular); and 9% circle.

These results are similar to the other two harvests. The percentages of shapes found in Indonesian crops are similar to those of Australian crops, because this attribute is greatly influenced by the pearl seeding techniques. The percentages of colour, however, differ markedly with Indonesian crops tending towards the yellows and golds, and Australian crops silver and white.

Historically, the colour of pearls has been attributed to local environment conditions. Preliminary genetic selection programs are being conducted by manipulating the colour of graft tissue used during seeding. Early results are promising.

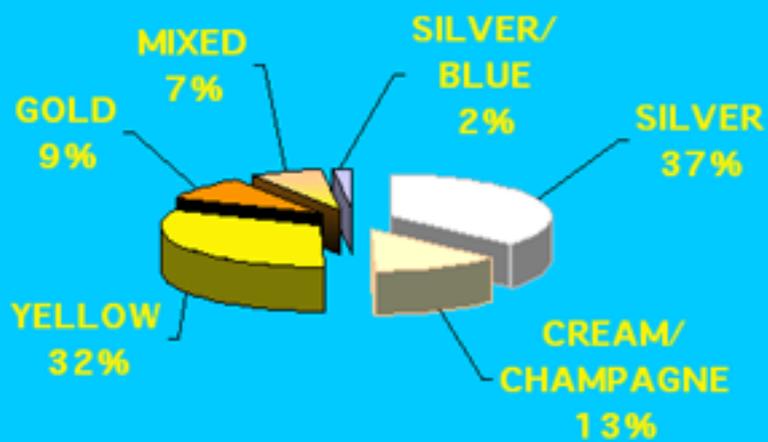
**KEYWORDS:** sea pearls, hatchery oysters

Percentages of pearls by shape  
(total harvest: 125.23kg)



Round	Semi-round	Drop	Drop/mix	Button	Baroque	Circle
26%	14%	15%	12%	13%	11%	9%
32.56kg	17.53kg	18.78kg	15.03kg	16.28kg	13.78kg	11.27kg

Percentages of pearls by colour  
(total harvest: 125.23 kg)



Silver	Yellow	Cream	Gold	Mixed	Silver/blue
37%	32%	13%	9%	7%	2%
45.76kg	40.07kg	16.40kg	11.40kg	9.13kg	2.47kg