

THE HAUL FROM OUR BACKYARD

These days, order a barramundi dish in a restaurant and chances are high that you are biting into locally farmed fish. We check in with fish farmers to see how they are producing quality catch for chefs.

words **CHARLENE CHOW** photos **SARA AMAN, KÜHLBARRA, TIBERIAS HARVEST, WINTERSHINE, DEHESA**



It is a clear, still morning on the waters off Pulau Semakau. Here at Kühlbarra fish farm, a cylindrical feed machine fires feed pellets into a square sea cage, disturbing the quiet. Farm manager Emmanuel de Braux is telling me about fish anxiety. "Apart from the composition, the size of the feed is very important. Every time the barramundi have to surface to get the feed, they get a little stressed out, as they are quite timid and don't like to separate from the group," he says. "So the bigger the feed, the better for them, as they get their fill faster, and they'd have to surface less often."

On this 7.5-hectare farm, every stage of the Australian barramundi's development is closely monitored, from the time the fry are vaccinated in the nursery, to their transfer to small and, subsequently, large open net sea cages where they grow until about 4kg in size. The whole cycle takes about two years. The barramundi's nutrition is calibrated and adjusted with a feed (supplied by major fish feed maker

Skretting) made of sustainably sourced fish meal, plant proteins such as corn, canola, lupines and soybeans, and oils that give the fish high levels of Omega-3 and Omega-6.

AN EXACT SCIENCE

Kühlbarra's meticulous production system is based on a salmon fish farming model adapted by founder and managing director Joep Staarman. His prior experience in the salmon industry helped him leapfrog farming techniques, for instance, knowing that vaccines (rather than antibiotics) were the way to go. The farm has its own vaccines company and conducts ongoing research and development to stay on top of this critical element in the farming process. "In the nursery, the fish are vaccinated against things that could happen to them in the sea. Once they are in the sea cages, we don't do anything except feed them and change the nets to prevent too many algae from growing and clogging up the nets, and blocking the water from flowing through the cages," explains Staarman.

The water conditions off the south of Singapore played a big part in their decision to locate the farm there: strong tidal currents give the fish the exercise they need, which results in their supple texture. With a second farm located off Raffles Lighthouse, they aim to raise their production volume from 500 tonnes last year to 6000 tonnes in 2020 for local and overseas markets. They are currently exporting to Australia and the U.S. Plans are also in the works to use their own broodstock to breed their own fry.

Judging by the numbers—Kühlbarra recorded a five-fold increase in local orders in the second half of 2015—the popularity of their fish is on the rise. They have also just secured a deal with SATS to supply Kühlbarra barramundi on Singapore Airlines flights starting this month. Some of the restaurants using their fish include Bread Street Kitchen, Ocean Restaurant by Cat Cora, Tung Lok's Lokkee, Salt Grill and Sky Bar, Gattopardo Ristorante di Mare, Stellar at 1-Altitude and Wild Rocket.

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Chef Willin Low of Wild Rocket creates mod-Asian dishes with the fish such as Tagliarini 'Giam Her' Aglio Olio with Kühlbarra Barramundi Toro done two ways and Kühlbarra Barramundi Fillet with Mixed Mushrooms & Black Truffle Sabayon. He says, "The toro has such a nice bounce because of its fat that I decided to serve it cooked and raw so there is a contrast in texture from the same ingredient. This would not have been possible if the quality of the fish wasn't great." On whether the fish is priced significantly higher than similar types of swimmers he could have sourced elsewhere, Low says, "It is more expensive, but it is very good value for money. Between a fish that is fresh and has higher Omega-3 fats, and another fed with feed that has no traceability, which one are you more likely to serve to yourself or your children?"

It's not just about the feed and farm location—other farms tinker with the quality of the seawater in closed containment systems. Near Pulau Ubin, in the eastern waters off Singapore, Singapore Aquaculture Technologies (SAT) is a fish farm that produces seabass, snapper and grouper. A subsidiary of Singapore-based sustainable oil and protein company Wintershine, SAT keeps their fish in tanks filled with purified seawater: the key technology is using Recirculating Aquaculture System (RAS) and flowthrough systems to monitor, filter, treat and oxygenate water in water tanks to achieve the most conducive conditions for growing stress-free fish.

"Controlling the water quality means four things: pumping water at a fast flow rate to ensure the fish don't sit in stagnant water; filtering it down to five microns to make it crystal clear; passing all filtered water through ultraviolet rays to kill bacteria and viruses, and oxygenating it after UV treatment so that the fish don't struggle to get oxygen and are always in a state of relaxation," says Dr Michael Voigtmann, director of Wintershine. He adds that he is able to keep their prices competitive compared to other ways of fish rearing because their mortality



- 1 Aerial view of Kühlbarra farm off Pulau Semakau
- 2 Kühlbarra farmers Emmanuel de Braux and Arani Selvam
- 3 Firing feed pellets into the sea cages

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rates are lower and the productivity is higher.

FRESH UPON DELIVERY

Over at Tiberias Harvest, a family-run farm off Pulau Ubin with a monthly output of about two tonnes of fish, there is a firm stance on avoiding the use of antibiotics and chemicals. Owner Raymond Sng says he tries to "work with and not against nature" by farming less intensively and allowing space and time for the fish to grow naturally and gradually. Tiberias Harvest has seen demand for their fish growing steadily, with seabass and snapper continuing to be their most popular fishes, and a rising interest in their grouper.

Head chef Dannel Krishnan of Kite is one of Tiberias Harvest's customers. The restaurant's 'Ubin Sea Bass' and golden snapper come from the farm—the former is cooked sous vide with a little dashi butter and the latter is served as sashimi. "The fishes are one of the best tasting ones I have had here," remarks Krishnan. The restaurant acknowledges that although the fish is pricier than similar ones they can get from the region, it still costs a lot less than the imported catch from Europe and Japan.



Other restaurants that are proponents of Tiberias Harvest fish include Dehesa and Bacchanalia. Says chef Jean-Philippe Patrino, chef-owner of Dehesa, "I like that you can order daily, and the fish are harvested the same day, making them very fresh. We order the grouper, golden snapper, *lala* (clams) and *gong gong* (conch)."

At Ah Hua Kelong located off Changi and Sembawang, business partners Bryan Ang and Wong Jing Kai stress that they are a "traditional fish farm" producing one to two tonnes of fish a month. Ang says that there is a common misperception that fish farmed locally have a muddy taste: they often take time to explain to customers that their sea-farmed catch, unlike freshwater fish, would not have such a flavour. Their seabass and mussels are the most saleable items among their seafood. The farm has a stall at Pasar Bella, and plans to open another in Bedok this June. They are also exploring the idea of opening a full-fledged seafood eatery.

Restaurant Ember orders sea bass from Ah Hua Kelong and will be ordering grouper for their Mother's Day menu. "I like their fish because of its freshness. They harvest it in the morning and get it delivered to us on the same day," says executive chef Alex Phan, who incorporates local flavours into his modern European fare. "I am more than happy to support local as much as I can."

Dr Voigtman echoes Phan's sentiments: "The trend [of eating more] local fish is slowly taking root in Singapore as more consumers become conscious of buying from an unknown source overseas. Local fish will always be fresher than their imported counterparts. Freshness needs no explanation—it just tastes better." **WD**

4 *Lala* dish from Dehesa
5 Kuhlbarra barramundi
6 Tiberias Harvest farm
7 Water tanks at Singapore Aquaculture Technologies

WHERE YOU CAN SAMPLE
LOCALLYGROWN GOURMET FISH

- **BACCHANALIA**
39 Hong Kong Street. Tel: 9179 4552
- **DEHESA**
12 North Canal Rd. Tel: 6221 7790
- **GATTOPARDO RISTORANTE DI MARE**
34/36 Tras Street. Tel: 6338 5498
- **KITE**
53 Craig Rd #01-01. Tel: 9729 7988
- **LOKKEE**
68 Orchard Road, #03-01, Plaza Singapura. Tel: 6884 4566
- **MARKET GRILL**
208 Telok Ayer St. Tel: 6221 3323
- **RESTAURANT EMBER**
50 Keong Saik Rd. Tel: 6347 1928
- **SALT GRILL & SKY BAR**
2 Orchard Turn, #55-01 & #56-01 ION Orchard. Tel: 6592 5118
- **TIPPLING CLUB**
38 Tg Pagar Rd. Tel: 6475 2217
- **WILD ROCKET**
10A Upper Wilkie Rd. Tel: 6339 9448

WHERE TO BUY
LOCALLY FARMED
FISH ONLINE

- **AH HUA KELONG**
www.ahhuakelong.com
- **KÜHLBARRA**
www.kuhlbarra.com
- **THE ORGANIC GROCER**
www.theorganicgrocer.com
- **THE FISHWIVES**
www.thefishwives.com
- **HUBER'S BUTCHERY**
www.hubers.com.sg
- **THE BUTCHER**
www.thebutcher.com.sg
- **TIBERIAS HARVEST**
www.sampancatch.com
- **STRAITS MARKET (UNDER WINTERSHINE)**
www.straitsmarket.com