



FHF Seminar 19/11-2013:  
Sporing av Tilapia i  
Malaysia.



# Juks med merking og opphav

## Chicago May 10, 2007

In the United States, the Congressional Research Service -- Congress' research arm -- issued a report last month citing a government survey that found 37 percent of fish examined by the National Marine Fisheries Service were mislabeled. A separate survey by the Fisheries Service found a whopping **80 percent of red snapper was mislabeled.**

To see whether what's presented on sushi menus as red snapper really is, the Chicago Sun-Times visited 14 restaurants in the city and suburbs, bought sushi and sent sugar-cube sized samples to a lab that specializes in genetic testing of animals.

**LOCATION:** Bluefin, 1952 W. North

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** General manager said he didn't know that what he orders is tilapia and, as a result, changed menu to say: "Izumidai (Tilapia)."

**LOCATION:** Chi Tung, 9560 S. Kedzie

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Owner said she trusts her supplier, insisting: "Of course, it's red snapper. If we order red snapper, we have to get red snapper."

**LOCATION:** House of Sushi & Noodles, 1610 W. Belmont

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Didn't return calls.

**LOCATION:** Japonais, 600 W. Chicago

**WHAT WE ORDERED:** Japanese red snapper

**DNA RESULT:** **Red sea bream**

**EXPLANATION:** Owner said customers wouldn't recognize "sea bream" on the menu.

**LOCATION:** Kamehachi, 1400 N. Wells

**WHAT WE ORDERED:** Japanese red snapper

**DNA RESULT:** **Red sea bream**

**EXPLANATION:** Owner said she has always referred to the fish as Japanese red snapper.

**LOCATION:** Kikuya, 1601 E. 55th

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Didn't return calls.

# Juks med merking og opphav

**LOCATION:** Nohana, 3136 N. Broadway

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Questions were referred to the manager at sister restaurant Shiroi Hana, who said it was likely a mistranslation -- and changed the menu to "Izumidai (Tilapia)."

**LOCATION:** Oysy, 315 Skokie Blvd., Northbrook

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Inconclusive**

**EXPLANATION:** Didn't return calls.

**LOCATION:** Renga Tei, 3956 W. Touhy, Lincolnwood

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Red sea bream**

**Explanation:** Chef/owner said customers recognize "red snapper" on a menu but wouldn't know what they were getting if they saw "sea bream."

**LOCATION:** Sushi Bento, 1512 N. Naper Blvd., Naperville

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Manager said the restaurant uses red snapper -- and said tilapia and red snapper "taste almost the same."

**LOCATION:** Sushi Mura, 3647 N. Southport

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Owner said the restaurant offers what its supplier sells as red snapper.

**LOCATION:** Sushi Wabi, 842 W. Randolph

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Red Sea Bream**

**EXPLANATION:** Owner pulled it off the menu, said she thought she'd been getting red snapper.

**LOCATION:** Tatsu, 1062 W. Taylor

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Manager said supplier recommends tilapia. Said owner switched to ordering whole red snapper based on Sun-Times findings.

**LOCATION:** Todai, Woodfield mall, Schaumburg

**WHAT WE ORDERED:** Red snapper

**DNA RESULT:** **Tilapia**

**EXPLANATION:** Company spokesman blamed a translation mistake. Label on buffet line has been changed to "Izumidai (Tilapia)."



## FISH FRAUD IS OFF THE SCALE AT RESTAURANTS NATIONWIDE


Oceana volunteers collecting fish samples from 674 restaurants, sushi bars and supermarkets in 21 states found that fish fraud is rampant. For instance, 87% of the snapper samples were not snapper. Selling one kind of fish under another name is illegal under FDA regulations, but there is little federal oversight.

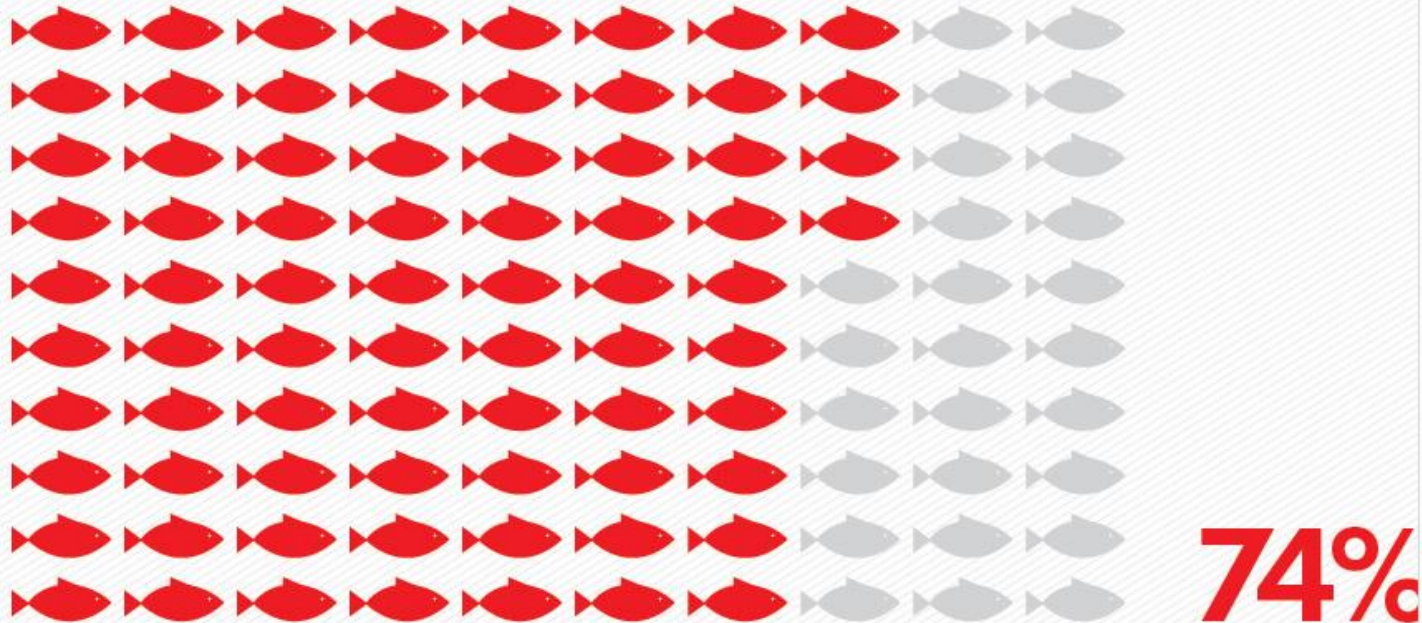


1

2

3

 Percentage of sushi restaurants that had at least one mislabeled sample



Source: Sources: Oceana; National Fisheries Institute.  
Janet Loehrke and Denny Gainer, USA TODAY

Frozen Chinese filets,  
not traceable and not  
of verifiable origin.

Trapia. Traceable from  
egg to plate, 100%  
verifiable origin.

Frozen Indonesian, Thai,  
Vietnamese and Philippines  
tilapia. Traceable, verifiable?

Fresh Ecuadorean, Costa  
Rican and Honduran tilapia  
filets. Probably traceable, but  
verifiable?



# Trapia Malaysia Sdn Bhd

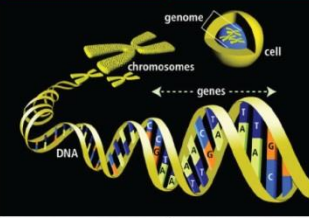
Malaysia  
Trapia Hatchery, Gerik

Broodstock **GAP Certified**



Singapore  
DNA Analysis Laboratory (TLL)

Fin & Meat Samples **ISO 17025**



Broodstock DNA      Product DNA

Malaysia, Singapore & USA  
Retail & Food Services

Premium Brands **HACCP**




Malaysia  
Trapia Hatchery, Gerik

Eggs **GAP Certified**



Genopass DNA Verification Engine




Malaysia & Overseas  
Distribution, Ships & Trucks

Frozen & Fresh Prod. **HACCP**



Malaysia  
Trapia Nursery, Lake Temenggor

Vaccinated Juveniles **GAP Certified**



Malaysia  
Grow-out Farm, Lake Temenggor

Food Fish **GAP Certified**



Malaysia  
Process & Packing, Parit Buntar

Fillet & Whole Fish **HACCP**



# Oreochromis niloticus

















# Lake Temenggor



# Lake Temenggor



# Settefiskanlegg



# Settefiskanlegg





# Lake Temenggor - Modul 1



# Lake Temenggor - Modul 1



# Lake Temenggor - Modul 1



# Lake Temenggor - Modul 1



# Lake Temenggor - Modul 1



# Filetering og pakking



# Filetering og pakking











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Distribusjon lokalt marked

www.genopass.com





genopass™

Distribusjon lokalt marked

PRODUCT OF MALAYSIA

PRODUCTION DATE: 04 NOV 2009  
LOT No: P 3080930402

INTERNATIONAL FOOD CONSULTANTS  
Laval, Quebec, Canada H7L 5Z1

NET WEIGHT  
**10 lbs**

PRODUCT OF MALAYSIA



Packed for:  
**INTERNATIONAL FOOD CONSULTANTS**  
Laval, Quebec, Canada H7L 5Z1



**IQF *Tilapia* Fillets**  
Skinless & Boneless



IVP     BULK     DS     SS

3oz / 5oz

5oz / 7oz

7oz / 9oz

9oz / 11oz

OTHER



PRODUCT OF MALAYSIA

**LOINS**

**2oz/4oz**



Packed for:  
**INTERNATIONAL FOOD CONSULTANTS**  
Laval, Quebec, Canada H7L 5Z1

**KEEP FROZEN**

NET WEIGHT

**10 lbs**



genopass™

# Boston Seafood Show

www.genopass.com

**GENOPASS.COM** **Trapia**

**ORIGIN VERIFIABLE**

- Trapia is the first company in the world to implement the brand new and tamper proof Genopass™ System for verification of origin using state-of-the-art DNA recognition technology.


- Genopass™, the genetic passport, can be implemented in a variety of operations and for many different types of farmed species, including marine and freshwater fish and different types of shrimp.

Samples are collected from Genopass™ certified products and DNA is extracted from the cells. It's analyzed using either SNP markers or Microsatellite markers. The result is matched against the DNA of the brood stock of the products. The verification is powerful and gives a clear negative result for fake products.

The genes of the brood stock and certified products are not altered in any way.

**GENOPASS.COM** **Trapia**

**TRAPIA**  
TRACEABLE TILAPIA

Superior quality production  
Clean environment  
Full traceability

Trapia process

Modern equipment  
ISO & HACCP  
Full traceability

Premium customers

Safe sustainable  
Premium product  
Verifiable origin

Trapia's monitoring system is an on-line system that allows customers to verify the origin of their products at any time.

Trapia offers what is probably the most premium tilapia product in the world. Our fish are grown under optimal conditions in a pristine environment to guarantee consistent superior quality and taste.

- Sustainable farming. - Responsible delight!

**Trapia**

**TRAPIA**  
TRACEABLE TILAPIA

**People First Performance Now**

**MARITIME**  
Maritime Export Trade Development Operators  
www.maritime.gov.my

**Atlantic Canada**

**INDIA**

**GAHRE**

**GAHRE MARINE EXPORTS PVT LTD**  
KANSABAI, PUNE

clean and sanitize without chemicals

using the science of sea

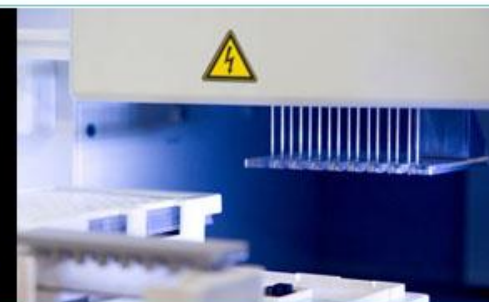
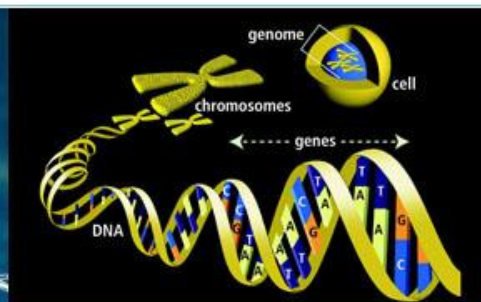
1. Innsamling av DNA profiler fra stamfisk samt kryssinger om nødvendig.
2. Full kontroll på logistikk fra klekkeri til salg!
3. Rutinekontroller.





Database:	Trapia	▼
User:	<input type="text"/>	
Password:	<input type="password"/>	
<input type="button" value="Sign in"/>		

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*The core technology consists of three parts - the DNA analysis laboratory, the verification server and the web portal. The web portal hosts our client traceability system while the server stores DNA profiles and runs the verification algorithms.*

The Genopass™ Server is the engine of the System, it's a powerful business application capable of comparing millions of DNA profiles in a matter of seconds. The Server is storing DNA profiles of all broodstock in certified hatcheries enabling it to quickly compare profiles of samples collected from certified products with those of the corresponding broodstock. If the product is genuine the profile will match.



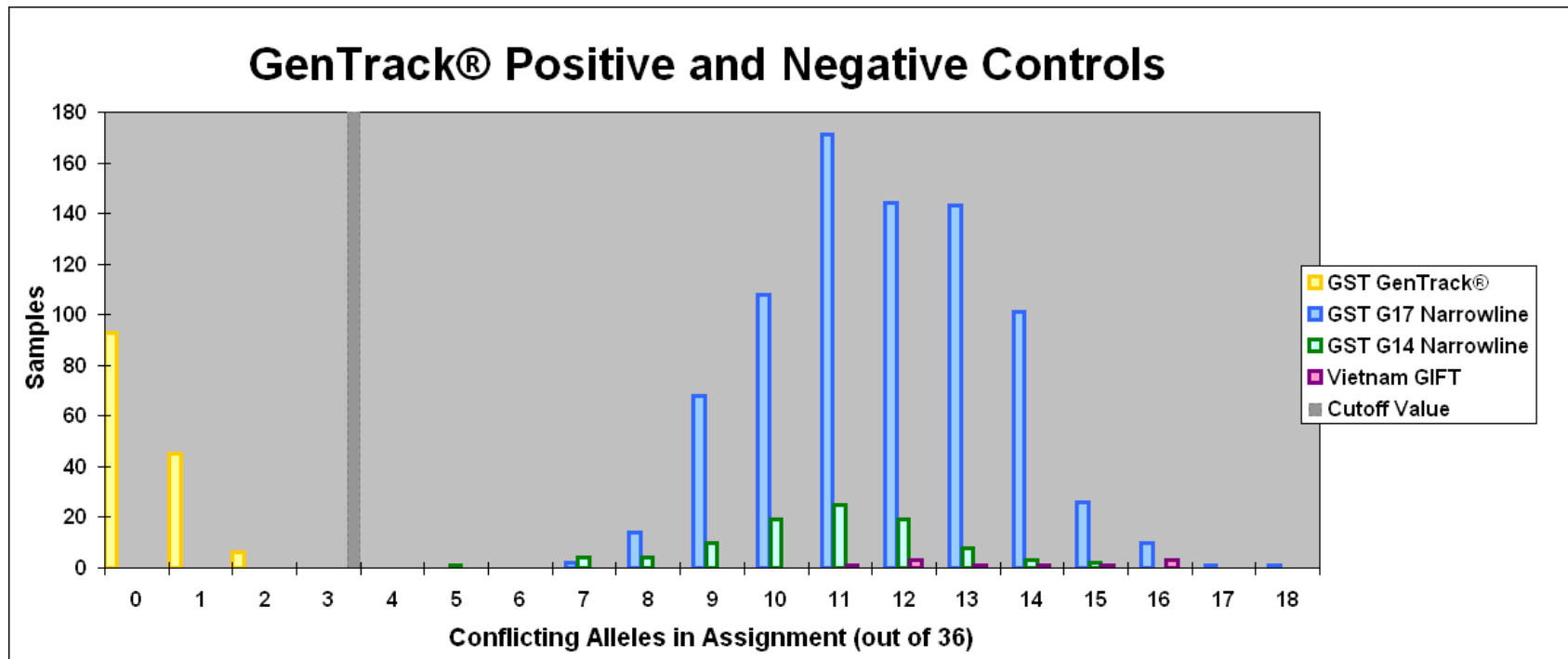
*- Samples for DNA analysis are collected from different parts of the value chain using small specially designed glass vials. The vials are sealed and the samples are preserved using ethanol. Each vial typically holds 10-20 samples. Vials are supplied by the Genopass™ Company according to need and they all have their own barcode for unique identification. Vials are returned to Genopass™ authorized laboratories for verification of origin.*

The web portal is used by our clients for obtaining documents, registering collected samples in their own private database and studying new and historic verification results. The portal also has administration tools for admins to define organizational structures within their own company and authorize users to access their company database. Access should be given only to people directly involved in collection of samples.



# GenTrack - tidlig test i Singapore

1. Grundig test på Nil-tilapia med totalt 18 microsatellitter.
2. Fremmede prøver passer ikke inn i foreldrepanelet selv om de er fra samme stamme.





- 1. Branding - bygge tillit hos forbruker? Markedet overeksponert for sertifiseringsordninger?**
- 2. Produsent kan kontrollere at distributører ikke pakker om produktene eller blander inn annen fisk!**
- 3. Distributører kan kontrollere at produsenter leverer fisk fra avtalt farm!**
- 4. Bonus – sporing av rømt fisk!**