





# REPORT ON THE EXAMINATION OF SUSPECTED DYNAMITE FISH (*Monotaxis grandoculis*) FROM ALEIPATA

Atonio Mulipola (<u>Fisheries Officer</u>) P.O. Box 1874 Apia Western Samoa Your ref: Our ref:

## <u>Government of Western Samoa</u> Department of Agriculture, Forests and Fisheries. Fisheries Division, Apia.

REPORT ON THE EXAMINATION OF SUSPECTED DYNAMITE FISH

Fish type sampled: Large-eyed bream ( *Monotaxis grandoculis)* <u>Mu-</u> matavaivai.

Number of fish sampled: One gutted fish used to examined external and internal injuries sustained by fish.

Reported fishing method: Not mentioned

The fish examined showed a fairly good condition, thus indicated that it was caught on the same day and not more than few hours when the sample was upheld for examination.

#### EXTERNAL EXAMNINATION.

Close examination of the unguited fish showed the following features:

1. Eye: Fish eye beginning to cloud at edges (10%).

2. Body colour: slightly dull colour (grey) with skin gloss, a little dull.

3 Gill colour. Darker red and a little slimy.

4. Flesh texture: Flesh firm and a little less elastic (spring back when pressed but not as quickly)

5. Flesh damage and scales: Some scales were missing of fish examined and this could be due to handling. A test was carried out to determined the condition of scale resistance to an apply force. The blunt side of the knife was used to descale the fish. The result showed that scales were easily removed with lesser force applied, thus indicated that the fish have suffered from an extremely strong force/blow.

Examination was also looked at any visible scale damage behind the operculum which is the major indicative sign of fish caught by gillnet. However, there was no visible scale damage therefore, indicated the fish was not killed by gillnet.

The fish was also examined for visible spear mark, however there was nothing visible, therefore spear fishing is ruled out as the possible catching method.

A closer examination of the mouth showed no hook marks around the premaxillary and maxillary area on the upper jaw and the lower jaw, hence the hook and line is also ruled out as a possible catching method.

6. The backbone column has been tested by holding the fish by its tail end, hence showed it sustain the fish weight at approximately 45 degrees angle.

## INTERNAL EXAMNINATION

A sharp pointed knife and forceps were used to cut through the anal pore to expose digestive region and completely removing one side section of fish flesh by cutting from the operculum opening along the backbone to the tail end.

1. Digestive/Gut contents: All digestive organs were intacted. The fish examined has a puncture swimbladder maybe inflicted by the dissecting equipments.

2. Backbone/Vertebrate area: The backbone of the fish examine were unbroken/not tractured.

### CONCLUSION

From closer external and internal examinations, it is therefore conclude that the fish sampled was not caught from spear, gillnet or line and hook but maybe resulted from other means which can inflicted less external body damages such as 'ava niukini', 'bleach' or 'dynamite' (if positioned further away from the center of the blast). However, it was scientifically proved that fish at a distance of few hundred meters from the center of the blast can be killed by the impact of the underwater travel sound. Intacted digestive organs, and unbroken backbone column suggested that the sampled fish was not caught by dynamite fishing methodas suspected. However, the fish sampled I believed, can be killed by two suspected ways; poison (ava niukini\bleach) and dynamite ( if positioned further from the center of the blast).

Senior Marine Diologist (Acting)

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