

PRACTICE ABSTRACT n° 45

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Fish oil from farmed fish

The *Barbus altianalis* (Rippon Babel) is a native carp locally known as Kisinjja in Uganda. It is regarded as a high value species because it is cherished as culturally socially and economically important by communities in central and western regions of the country. The fish is also liked for its fatty soup. Fat was largely extracted from the viscera of *Barbus* sp. Fish oil was extracted using an oil press machine. The oil yield from visceral fat was 50% of total viscera weight. The characteristics of the oil are shown in the table below:

Chemical Parameter	Results during experimentation	Results 2 during validation	Codex Standard (CXS 329-2017)
Acid Value (mg KOH/g)	10.367	11	≤ 3 mg KOH/g
Anisidine Value (% mass/mass)	12.177	15	≤ 20 % mass/mass
Iodine Value (I ₂ /100g)	90.403	82.6	Not specified
Moisture Content (% mass/mass)	5.500	4.6	Not specified
Peroxide Value (meq/kg)	14.533	7.6	≤ 5 meq/kg
Saponifiable Matter (mg KOH/g)	180.833	178.902	Not specified
Unsaponifiable Matter (% mass/mass)	11.283	8.6	Not specified

The fish oil was within acceptable limits for anisidine value as specified in the Codex Alimentarius standard for fish oil (CXS 329-2017) however, peroxide and acid value were out of range thus there is need for process improvement.

