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Fish seeds and fingerling — Requirements for certification

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In order to match with technological development and to keep continuous progress in industries, standards are subject to periodic review. Users shall ascertain that they are in possession of the latest edition

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Foreword

Rwanda Standards are prepared by Technical Committees and approved by Rwanda Standards Board (RSB) Board of Directors in accordance with the procedures of RSB, in compliance with Annex 3 of the WTO/TBT agreement on the preparation, adoption and application of standards.

The main task of technical committees is to prepare national standards. I Draft Rwanda Standards adopted by Technical committees are ratified by members of RSB Board of Directors for publication and gazettment as Rwanda Standards.

WD xxx was prepared by Technical Committee RSB/TC 036, *Fish and fishery products.*

In the preparation of this standard, reference was made to the following standard (s):

1) XYZ: Title

The assistance derived from the above source is hereby acknowledged with thanks.

This second/third/... edition cancels and replaces the first/second/... edition (RS nnn-n: yyyy), [clause(s) / subclause(s) / table(s) / figure(s) / annex(es)] of which [has / have] been technically revised.

(The first/second/third/... edition (RS nnn-n: yyyy) has been reaffirmed by the Board on dd-mm-yyyy.)

Committee membership

The following organizations were represented on the Technical Committee on *Fish and fishery products* (RSB/TC 036) in the preparation of this standard.

Paragraph of participants

Rwanda Standards Board (RSB) – Secretariat

Introduction

The standard provides for harmonized requirements, procedures and documentation to facilitate cross border trade by ensuring compliance with regulatory requirements. It is designed to ensure fish seeds and fingerling that cross borders are safe and of high quality and are of the required standard. The document is intended for fish seeds and fingerling inspectors working at border posts, and any other person involved in fisheries and aquaculture inputs and products trade. This document was developed to describe Fish Seed and fingerling Certification and Accreditation with the purpose:

To provide quality fish seeds and fingerling which ensure production and potentiality in the grow-out farm in a scientific manner for a successful and sustainable enterprises.

To strengthen fish seeds and fingerling certification and accreditation to meet the requirement of qualitative & quantitative seeds for sustainable aquaculture.

Fish seeds and fingerling — Requirements for certification

1 Scope

This Working Draft Standard specifies the certification requirements for the production of fish seed production, rearing, stocking, transport of fish seed and its monitoring. It includes requirements for eligible varieties/species, farm standards, farm inspections, laboratory standards, certificates, packaging and labelling, storage and transportation.

2 Normative references

There are no normative references in this document

3 Terms and definitions

For the purposes of this standard, the terms and definitions given in ISTA, and Border Fisheries Inspector and the following shall apply.

3.1

competent authority

Ministry having responsibility and any local or officially recognised authority

3.1

Accreditation

a procedure by which a competent authority gives formal recognition that an eligible fish seed farm is competent to carry out fish breeding and rearing of seed.

3.2

fish

includes shell fish and fish in all stage in its life-history.

3.3

Brood fish

A mature/gravid fish (male & female) having matured gametes for producing hatchling/spawn

Stocking of genetically matured fishes ready for breeding purposes

3.4

Certification

A procedure by which a fish seed farm recognized by accrediting agency gives written assurance those product/services of fish hatchery confirm to the specific requirement.

3.5

Certified fish seed

Seed produced by an accredited fish hatchery or fry raised by an accredited fish seed farm duly certified by the producers that their produce (spawn/seed) is in consonance with specific norms. Certified fish seed shall be used only for table fish and not for raising brood stock/breeding purposes.

3.6

Fish Seed Farm

Farms used to raise quality fish fry, fingerlings/yearlings to be used in aquaculture practices from accredited hatchery.

3.7

Fish breeding

Captive propagation technology by which brood/gravid fish are artificially made active to produce their progeny/early stages of life cycle/= including spawn

3.8

Fish Hatchery

Fish hatchery is a production unit that uses brood stock, breeding and husbandry practices as per norms and produces quality fish seed at the earlier stage of life cycle of fish such as spawn or equivalent stages specific to species through indigenous cultivable species (A group of native fresh water cultivable fishes found in geographical areas).

3.9

Fingerling

refers to a fish that has reached the stage where the fins can be extended and where scales have started developing throughout the body

3.10

Fish and fingerling seed test certificate

legal document issued by the competent authority, which states that a seed lot has met the requirements set in this standard

3.11

farm

defined and identifiable area of land or facility that is used to produce a seed fish seed under the Seed Certification Scheme

3.12

farm inspection

inspection of a farm and or fish seed, by an inspector to check if the minimum requirements for seed

3.13

inspector

authorized official or accredited entity responsible for carrying out certification activities

3.14

label

stick-like that is attached to or written, or printed on any container of seed or that accompanies any lot of bulk seed and which describes the kind of seed and any other information required by relevant regulation

3.15

variety

assemblage of cultivated fish that is clearly distinguished from other varieties by any characters (morphological, physiological, cytological, chemical, or others) and which retains its distinguishing characteristics when reproduced by the normal means for the fish seed and variety

4 Eligible species/varieties for certification

4.1.1 Species/varieties eligible for fish seed and fingerling certification shall be those registered in the national list of species catalogue.

4.1.2 The national fish seed certification authority shall keep the official descriptor of the species/varieties in hard and electronic copies.

4.1 Application requirements for certification

Fish seeds and fingerling shall be certified based on the following criteria:

a) Pathogen free

b) Fish seeds and fingerling shall be active in the bowl

c) Seed shall not have any antibiotic residues such as chloramphenicol, nitro furan more than the allowable limits

d) shall not have moulting stage, 10% may be allowed.

e) Test for MBV and WSSV should be negative

f) shall not have any parasites.

5 Fish seed types

For the purpose of this standard, the following classes of seed shall apply:

a) Grass Carp;

b) Female Catla and male Rohu (Nadan) or any other hybrid varieties developed through Captive breeding of the parents between two taxonomical entities; and

c) Improved variety: Genetically improved variety, developed through breeding programme from parents of the same genus

6 Farm requirements

7.1 Fish seed and fingerling shall be produced under the responsibility of the breeder

7.2 Certified fish seed and fingerling may be produced in two generations.

7.3 The national certification authority shall inspect and certify the production of fish seed and fingerling

7.4 A farm producing a fish seed and fingerling shall be approved for certification if it complies with the requirements in Table 1.

Table 1 — Farm standards for seed fish seeds and fingerling

S/N	Fish seed	Size class (mm)
i.	Spawn	<8.00

ii.	Early fry	9 - 25
iii.	Fry	26 - 50 mm
iv.	Advanced Fry	51 - 100
v.	Fingerling	>100

7 Facility requirements

7.1 The infrastructure facilities for hatchery and fish seed and fingerling raising units shall be indicative and notexhaustive,need to varyfrom different seed productionfacilities.

7.2 The appropriate level of flexibility shall be allowed, with respect to the construction and layout ofthe physical facilities at the time of verification, depending upon the local circumstances provided thespecifiedcapacities,waterquality,Broodstockassessmentreportsarecompliantto thenorms.

7.3 Soil and water quality testing facilities, store room, staff quarters and securitysystemsareoptionalandshall bebuilt asperrequirementsand convenience.

8 Hatchery water requirements

7.1 an assessment of water quality shall be made at least once a quarter. First assessment during the period of hatchery operation and second after six months.

7.2 water for fish seed and fingerling production shall comply with the requirements as stipulated in Table

Table 2 — water requirements for seed fish seeds and fingerling

Water	**Requirements**
Water supply	Adequate, from a regular and dependable source
Types of water sources	Direct ground water (to be collected in open pond before pumping) open water body such as rivers, streams, lake etc, (To be allowed only if found to be free from any kind of pollution/contamination)
Water Quality	Free from algal blooms, Free from pesticides and heavy metal contamination, Free from pathogens causing relevant diseases, and Test report/ analysis are mandatory generated through standard test procedures.

9 Farm inspection

8.1 The competent authority shall prepare the inspections' schedule for the inspectors, based on all necessary information on the application form, to ensure that the timing of inspections allows the standards

8.2 Inspection of the farm shall be done in accordance with the competent authority procedures/manual Pesticide residues

Fish seeds and fingerling shall not exceed the maximum residue limits as specified in Table 3

Table 3 — Pesticide residue limits for seed fish seeds and fingerling

S/N	Pesticide residues	Maxim limits (ppm/L)
i.	aldrin	0.3
ii.	dialdrin	
iii.	chlordane	
iv.	DDT	0.5
v.	TDE	
vi. .	DDE	
vii.	Diquat	3
viii.	Heptachlor	0.3
ix.	Mirex	0.1
x.	PCB	2.0

10 Certificates

Certificate for a fish seed and fingerling lot shall be signed and issued by the competent authority and shall include all information presented in Annex A. This certificate shall be valid for a period of six months.

11 Packaging and labelling

12.1 Containers shall be clean, labelled and for exclusive use of transporting live fish.

12.2 The mark or label to indicate that fish seed and fingerling conforms to the size, source of seed and free from disease and pathogen, infections and other particulars as shall be specified from time to time by the competent authority.

12 Storage and transportation

12.1 Fish seeds and fingerlings shall be packed and transported in the early morning when travel can be more comfortable to the fish.

12.2 Fish seeds and fingerlings are transported in water tanks with continuous aeration and plastic bags, one third is filled of water and the remaining space with oxygen is popular in the transport system of Tilapia

12.3 If Fish seeds and fingerlings are transported for a considerable distance, transportation at night is recommended and water in the tank and air in plastic bags or transport containers are changed every 6 hours.

Bibliography

[1] https://www.wikiprocedure.com/index.php/Uganda_-_Withdrawal_of_Fish_Seed_Production_Certificate

[2] The Bihar Fish Seed Certification & Accreditation Act-2018 An Act

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