

Til-AQUA The CONCEPT

Factsheet 00039: Internship program

TIL-AQUA



INTERNATIONAL
YY-Technology

Internship – 2 to 3 days program

Location: Til-Aqua Netherlands or onsite if good facilities

Day 1

- ⊙ Introduction Slide 2; Factsheet 55
 - > History, Business vision; Factsheet 1
 - > Til-Aqua products Factsheet 30 (Red vs Silver)
 - > Projects
- ⊙ Promotion movie Slide 2
- ⊙ Guided tour around premises
- ⊙ Why mono-sex male production Factsheet 53
- ⊙ Advantages YY vs Sex Reversed Factsheet 22, 53
 - > Story about the natural reproduction of Tilapia in intensive farming system (mixed sex population)
 - > Production yield/optimum
 - > System

Day 2

- ⊙ Quarantine Slide 4
- ⊙ Swim-up Slide 8
- ⊙ Primary Nursery Slide 9
- ⊙ Secondary Nursery Slide 10
- ⊙ Grow-out Slide 11 ; Factsheet 49
- ⊙ Principles of RAS systems Concept, page 18
- ⊙ Factsheet 00003 Water change and cleansing_sedimentation tank.pdf
- ⊙ Factsheet 00047 Cleansing and disinfection.pdf
- ⊙ Factsheet 00051 Bio Security of closed Tilapia systems.pdf
- ⊙ Water quality parameters and water quality control; Factsheets 5, 7, 14, 15, 16, 18, 19
- ⊙ Factsheet 00005 Oxygen.pdf
- ⊙ Factsheet 00007 Temperature.pdf
- ⊙ Factsheet 00012 Bacterial infections.pdf
- ⊙ Factsheet 00052 Parasite control.pdf
- ⊙ Factsheet 00042 Treatments.pdf
- ⊙ Factsheet 00025 Grading.pdf
- ⊙ Quality of first feeding

Day 3

- ⊙ Feeding tilapia larvae Factsheet 41
- ⊙ First feeding/feeding rates Factsheet 41
- ⊙ Feeding protocols including practice
 - > Feed type, feeding frequency, feed size, nutrient requirements, etc)
 - > Feeding and sampling data and Feeding and growth table
- ⊙ Practice: Grading of fry 0.005-0.2 gram
- ⊙ Practice: Grading of fry 0.2-0.3 gram
- ⊙ Practice: Parasite control and treatment
- ⊙ Practice: Cleansing and disinfection
 - > Waterchange and cleansing sedimentation tank
- ⊙ Questions and discussion

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Internship – One week program

Location: Til-Aqua Netherlands or onsite if good facilities

Monday

- ⊙ Introduction Slide 2; Factsheet 55
 - > History, Business vision ; Factsheet 1
 - > Til-Aqua products Factsheet 30 (Red vs Silver)
 - > Projects
- ⊙ Promotion movie Slide 2
- ⊙ Guided tour around premises
- ⊙ Program Slide 3
- ⊙ Advantages YY vs Sex Reverse; Factsheet 22, 53
 - > Story about the natural reproduction of Tilapia in intensive farming system (mixed sex population)
 - > Production yield/optimum
 - > System
- ⊙ Quarantine Slide 4; Factsheet 47, 45, 42
- ⊙ Principals of RAS systems; The Concept, page 18, Factsheet 3, 47, 51, Water quality parameters and water quality control; Factsheet 5, 7, 14, 15, 16, 18, 19, 40, manual WQ Jambo

Tuesday

- ⊙ Conditioning Slide 5; Factsheet 28, 29
- ⊙ Spawning/harvesting Slide 6; Factsheet 29, 48, 4, 6, 9, Harvest Form
- ⊙ Harvest Administration; Factsheet 4, Harvest Form
 - > Planning of spawning production /density and replacement of spawning Factsheet 48
- ⊙ Preparations for transport (preparing boxes, etc..)
- ⊙ Incubation Slide 7; Factsheet 9, 10
 - > Management
- ⊙ Harvest practice
 - > Method of harvest / management Factsheet 4; Harvest form
 - > Different larval stages Factsheet 6
 - > Transport of larvae and eggs Factsheet 9 and 10
 - > Incubation

Wednesday

- ⊙ Swim-up Slide 8; Factsheet 41, 52, 42, 25
- ⊙ Presentation about size variation and grading in Tilapia; Pp size variation
- ⊙ Feeding (and stocking) swim-up fry; Factsheet 41 including practice
- ⊙ Practice: Grading of fry 0.2-0.3 gram; Factsheet 25
- ⊙ Practice: Grading of fry (0.05-0.3 gram); Factsheet 25
- ⊙ Disease prevention (practice, microscopy)/ treatment options/ Diseases worldwide. Factsheet 51, 52, 12, 42, 45
- ⊙ Biology/anatomy of Tilapia; Practice
- ⊙ Male ratio control: Factsheet 54 and 54A
- Sexing of female and male Tilapia by microscope

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Thursday

- ⊙ Primary nursery Slide 9; Factsheet 41, 25, Feeding and sampling, feeding and growth (simple)
- ⊙ Feeding tilapia larvae; Factsheet 41
- ⊙ First feeding/feeding rates; pdf Quality first feeding
- ⊙ Larval feeding, Optional
 - > pdf First feeding and internal development
- ⊙ Secondary nursery Slide 10; Factsheet 41, Feeding and sampling, feeding and growth
- ⊙ Grow-out (on-growing) Slide 11; Factsheet 41, 49, Feeding, sampling and growth
- ⊙ Feeding protocols including practice
 - > Feed type, feeding frequency, feed size, nutrient requirements, etc)

Friday

- ⊙ Visit to Fleuren en Nooijen and/or Feed Mill and/or other premises
- ⊙ Management of systems; Factsheet 50, 3
- ⊙ Hatchery management, planning of production, planning of replacement of broodstock, Factsheet 48
- ⊙ Record keeping in hatchery; Harvest Form, feeding form, treatment form, transfer form, water quality form etc
- ⊙ Off flavor (in on-growing); Factsheet 13
- ⊙ Quick scan business plan
- ⊙ Questions and discussion

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Internship – Two weeks program

Location: Til-Aqua Netherlands or onsite if good facilities

Week 1

Monday

- ⊙ Introduction Slide 2; Factsheet 55
 - > History, Business vision; Factsheet 1
 - > Til-Aqua products; Factsheet 30 (Red vs Silver)
 - > Projects
- ⊙ Promotion movie Slide 2
- ⊙ Guided tour around premises
- ⊙ Program Slide 3
- ⊙ Advantages YY vs Sex Reverse; Factsheet 22, 53
 - > Story about the natural reproduction of Tilapia in intensive farming system (mixed sex population)
 - > Production yield/optimum
 - > System
- ⊙ Quarantine Slide 4; Factsheet 47, 45, 42
- ⊙ Principals of RAS systems; The Concept, page 18, Factsheet 3, 47, 51, Water quality parameters and water quality control; Factsheet 5, 7, 14, 15, 16, 18, 19, 40, manual WQ Jambo

Tuesday

- ⊙ Conditioning Slide 5; Factsheet 28, 29
- ⊙ Spawning/harvesting Slide 6; Factsheet 29, 48, 4, 6, 9, Harvest Form
- ⊙ Harvest Administration; Factsheet 4, Harvest Form
 - > Planning of spawning production /density and replacement of spawning, Factsheet 48
- ⊙ Preparations for transport (preparing boxes, etc..)
- ⊙ Incubation Slide 7; Factsheet 9,10
 - > Management
- ⊙ Harvest practice
 - > Method of harvest / management Factsheet 4; Harvest form
 - > Different larval stages Factsheet 6
 - > Transport of larvae and eggs Factsheet 9 and 10
 - > Incubation

Wednesday

- ⊙ Swim-up Slide 8; Factsheet 41, 52, 42, 25
- ⊙ Presentation about size variation and grading in Tilapia; Pp size variation
- ⊙ Feeding (and stocking) swim-up fry; Factsheet 41 including practice
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- ⊙ Practice: Grading of fry (0.05-0.3 gram); Factsheet 25
- ⊙ Disease prevention (practice, microscopy)/ treatment options/ Diseases worldwide. Factsheet 51, 52, 12, 42, 45
- ⊙ Biology/anatomy of Tilapia; practice
- ⊙ Male ratio control: Factsheet 54 and 54A
- ⊙ Sexing of female and male Tilapia by microscope

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Thursday

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- ⊙ Feeding tilapia larvae; Factsheet 41
- ⊙ First feeding/feeding rates; pdf Quality first feeding
- ⊙ Larval feeding, Optional
 - > pdf First feeding and internal development
- ⊙ Secondary nursery Slide 10; Factsheet 41, Feeding and sampling, feeding and growth
- ⊙ Grow-out (on-growing) Slide 11; Factsheet 41, 49, Feeding and sampling, feeding and growth
- ⊙ Feeding protocols including practice
 - > Feed type, feeding frequency, feed size, nutrient requirements, etc)

Friday

- ⊙ Visit to Fleuren en Nooijen and/or Feed Mill and/or other premises
- ⊙ Management of systems; Factsheet 50, 3
- ⊙ Hatchery management, planning of production, planning of replacement of broodstock, Factsheet 48
- ⊙ Record keeping in hatchery; Harvest Form, feeding form, treatment form, transfer form, water quality form, etc
- ⊙ Off flavor (in on-growing); Factsheet 13
- ⊙ Quick scan business plan
- ⊙ Questions and discussion

Week 2

Practice onsite and in-depth discussions, questions, testing and evaluation.

On the spot: Program from 3 days to 2 weeks on location

Same as internship but adapted to local situation and circumstances