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Common Freshwater Fish Parasites Pictorial Guide: Sessile Ciliates[1]

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Introduction

This publication is one in a series of pictorial guides that is designed to assist in the identification of common freshwater fish parasites.

The information provided in this guide is not intended to be a complete, detailed description of each parasite or parasite group and its characteristics but rather is intended to assist in the visual identification of some of the most common species or groups of parasites seen in freshwater fish. For further information on each parasite, refer to publications in the "Recommended Reading" and "Reference" sections below.

Guide Information

- Target Tissue: provides the location on/in the fish where the parasite is most commonly found.
- Characteristic: provides a brief description about the appearance of the parasite.
- Size: provides the size or size range of the parasite. (1 µm = 0.001 mm = 0.0001 cm) (µm = micron or micrometer; mm = millimeter; cm = centimeter)
- Movement: provides the type of movement, if any, of the parasite.
- Note: provides a brief comment of interest about the parasite.

Sessile Ciliates

Ambiphrya (Formerly *Scyphidia*)

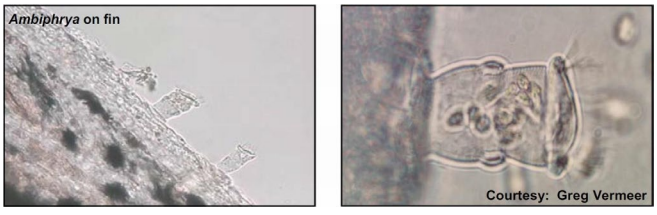

Figure 1. Ambiphrya: on fin (left)
Credit: Courtesy of Greg Vermeer (right)

Target Tissues: Skin, fin, gills

Appearance: Barrel-shaped with row of oral and mid-line cilia

Size: Approx. 50–95 µm x 40–61 µm

Movement: Not free-moving on fish; may see cilia move

Note: Common in water with high organic concentration

Apiosoma (Formerly *Glossatella*)

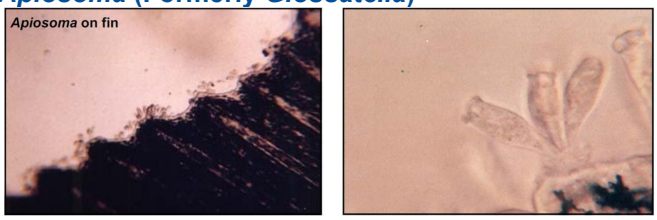

Figure 2. Apiosoma: on fin (left)

Target Tissues: Skin, fin, gills

Appearance: Vase-shaped with oral cilia

Size: Approx. 100 µm in length

Movement: Not free-moving on fish; may see cilia move

Note: Common in water with high organic concentration

Capriniana (Formerly *Trichophrya*)

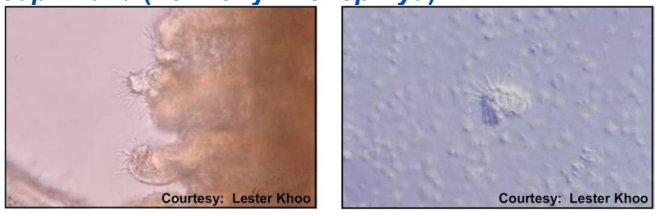

Figure 3. Capriniana
Credit: Courtesy of Lester Khoo

Target Tissues: Gills

Appearance: Amorphous shape with cilia which stick up like pins in pin cushion

Size: Approx. 40–110 µm x 25–70 µm

Movement: Not free-moving on fish

Note: Common in water with high organic concentration

Epistylis

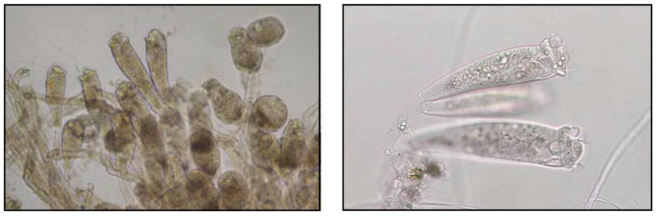

Figure 4. Epistylis

Target Tissues: Skin, fin, (less commonly) gills

Appearance: Elongated on stalks; forms colonies

Size: Zooids approx. 40–80 µm x 20–30 µm; stalks up to 1.2 mm in length

Movement: Not free-moving on fish; may see cilia move

Note: Common in water with high organic concentration; often found in combination with the bacteria *Aeromonas* sp.

Acknowledgements

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Recommended Reading

UF/IFAS Circular 91 Nematode (Roundworm) Infections in Fish. https://edis.ifas.ufl.edu/fa091

UF/IFAS Circular 120 *Fish Health Management Considerations in Recirculating Aquaculture Systems - Part 1: Introduction and General Principles*. https://edis.ifas.ufl.edu/fa099

UF/IFAS Circular 121 *Fish Health Management Considerations in Recirculating Aquaculture Systems - Part 2: Pathogens*. https://edis.ifas.ufl.edu/fa100

UF/IFAS Circular 122 *Fish Health Management Considerations in Recirculating Aquaculture Systems - Part 3: General Recommendations and Problem Solving Approaches*.https://edis.ifas.ufl.edu/fa101

UF/IFAS Circular 920 Ichthyophthirius multifiliis *(White Spot) Infections in Fish*. https://edis.ifas.ufl.edu/fa006

UF/IFAS Circular 921 *Introduction to Fish Health Management*. https://edis.ifas.ufl.edu/fa004

UF/IFAS Fact Sheet FA-13 *Use of Copper in Freshwater Aquaculture and Farm Ponds*. https://edis.ifas.ufl.edu/fa008

UF/IFAS Fact Sheet FA-90 *Pentastomid Infections in Fish*. https://edis.ifas.ufl.edu/fa090

UF/IFAS Fact Sheet FA-108 *Common Freshwater Fish Parasites Pictorial Guide: Motile Ciliates*. https://edis.ifas.ufl.edu/fa108

UF/IFAS Fact Sheet FA-109 *Common Freshwater Fish Parasites Pictorial Guide: Flagellates*. https://edis.ifas.ufl.edu/fa109

UF/IFAS Fact Sheet FA-110 *Common Freshwater Fish Parasites Pictorial Guide: Dinoflagellates, Coccidia, Microsporidians, and Myxozoans*. https://edis.ifas.ufl.edu/fa110

UF/IFAS Fact Sheet FA-111 *Common Freshwater Fish Parasites Pictorial Guide: Monogeneans*. https://edis.ifas.ufl.edu/fa111

UF/IFAS Fact Sheet FA-112 *Common Freshwater Fish Parasites Pictorial Guide: Digenean Trematodes*. https://edis.ifas.ufl.edu/fa112

UF/IFAS Fact Sheet FA-113 *Common Freshwater Fish Parasites Pictorial Guide: Nematodes*. https://edis.ifas.ufl.edu/fa113

UF/IFAS Fact Sheet FA-114 *Common Freshwater Fish Parasites Pictorial Guide: Acanthocephalans, Cestodes, Leeches, and Pentastomes*. https://edis.ifas.ufl.edu/fa114

UF/IFAS Fact Sheet FA-115 *Common Freshwater Fish Parasites Pictorial Guide: Crustaceans*. https://edis.ifas.ufl.edu/fa115

UF/IFAS Fact Sheet VM-104 Cryptobia iubilans *in Cichlids*. https://edis.ifas.ufl.edu/vm077

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