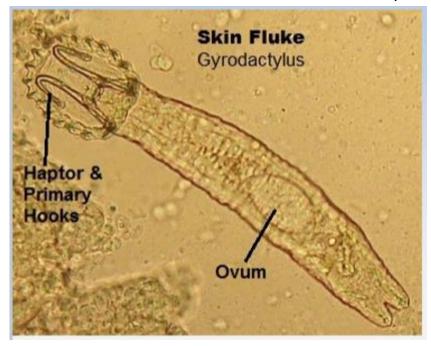
# **FOCUS ON...... Flukes**

**Skin Flukes** (Gyrodactylus) give birth to live young when conditions are favourable. On a scale of 1-10 this would be placed at a 6-7 for causing mortality in koi. This is due to the amount of tissue damage that can be done to the surface of the koi. The hooks are covered in pathogenic bacteria which often causes bacterial ulcers. Luckily treatment is often effective in one go as if



the parents die so too do the offspring.

#### **Identification:**

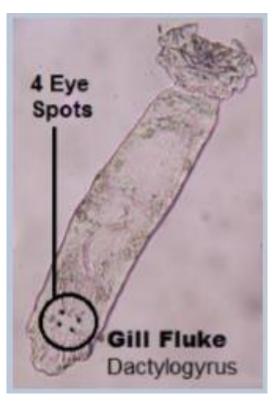
By taking skin mucous scrapes and microscopic examination of the sample on 50X to 100X magnification.

## **Symptoms:**

Extreme flashing, excess mucous production, bacterial ulcers/infection and in bad cases numerous deaths.

#### **Treatment for Skin Flukes:**

- Flubenol 5% 1 gram/89 gallons dissolved in Acetone 10ml/1000 gallons.
- Flukesolve, Fluke M, Fluke P, Alparex (ensure KH is over 5).
- Supaverm 1 ml/100 gallons. It is however difficult to acquire as a vet prescription is required. It is not licensed for the treatment of koi and can be very harsh on them.



### **Gill Flukes** (Dactylogyrus).

They are hermaphrodites, meaning they have both male and female anatomy. They lay eggs which can remain dormant until conditions become preferable, when they do hatch the young are free swimming but must find a host in approximately 24 hours. Treatment can be much more difficult as the life cycle can vary depending on temperature. The kill rate of treatments can often only manage 95%.

#### **Identification:**

Skin mucous scrape ideally from as close to the gills as possible. However, gill flukes are just as much at home on the body as they are in the gills. Magnification setting of 50X to 100X.

### **Treatment for Gill Flukes:**

- Same doses as above. Flukesolve, Fluke M, Fluke P and Alparex (KH needs to be above 5). Subsequent follow up treatments will be required to ensure newly hatched gill flukes are eradicated as much as possible.
- Supaverm at same dose as above however may not totally eradicate at first pass and may achieve 99% success rate with subsequent treatments.

Before adding any treatments it is essential that you make a positive identification of the parasite causing the problems.

Test your water parameters for Ammonia (NH3), Nitrite (NO2-), Ph, KH and Temperature.

Any treatments added are done so at your own risk. It is your responsibility to know your pond volume and to calculate dosages correctly. Always check the product labels. Turn off UVs if it states to do so. Add extra air.

The YKS will not accept responsibility for deaths of stock resulting from incorrect usage of chemicals/medication.

#### Skin Fluke Videos.

https://youtu.be/kPeWO3SSS1Q

https://youtu.be/xSdzL1 vk-E

https://youtu.be/yGuaWu0GXEQ

https://youtu.be/BXrqE6Lji5Y

## Gill Fluke Videos.

https://youtu.be/yLSiS4BoX9s

https://youtu.be/pLutCwGeX38

https://youtu.be/Sb4YKyBwWEA