

Batrachochytrium salamandrivorans (Bsal)

As the most "leopard" team can include and represent the pathogen in another field we:

- 1. Batrachochytrium
- 2. Salamandrivorans
- 3. Batrachochytrium salamandrivorans

Number of transmission are unknown but probably can include:

- Direct contact between
- Indirect contact via water
- Indirect contact via the feces of a dead

Life stages:

How does the pathogen survive? There is a lot of evidence suggesting that Bsal is a highly resistant pathogen. The pathogen is able to survive in water for up to 10 months. It is also able to survive on surfaces for up to 10 months. It is also able to survive in the environment for up to 10 months.

Types of effects the pathogen can have on the host:

- Acute (within 2 weeks)
- Chronic (within 2-3 months)
- Latent (within 3-6 months)

Global Distribution of Pathogen:

- 2012 - Spain
- 2013 - Spain
- 2014 - Spain
- 2015 - Spain
- 2016 - Spain
- 2017 - Spain
- 2018 - Spain

Canine Herpes

Order: Herpesvirales
Family: Alphaherpesvirinae
Genus: Varicellovirus
Species: Canid Herpes 1

Herpesvirus life cycle:

Transmission rate of varicellovirus in canine kennel:

Web of Knowledge:

22 results were identified. "Canine herpes virus" was the most common disease, but still in reference to new viral outbreaks.

| Age Group | USA | Canada |
|------------------|---------------|----------------|
| Total Population | 87% (181/209) | R: 51% (99/77) |
| Juvenile | 84% (137/164) | 23% (8/35) |
| Young Adult | 100% (19/19) | 52% (28/54) |
| Old Adult | 83% (5/6) | 87% (13/15) |

Global Distribution:

Notes:

- Canine herpes virus is a highly contagious virus that can cause a variety of diseases in dogs.
- It is most commonly found in kennels and breeding facilities.
- The virus can survive in the environment for up to 10 months.

Dogwood Anthracnose

By Mark Buck Jr.

Classification:

- Genus: *Discula*
- Order: *Discomycetes*
- Family: *Discomycetaceae*

Hosts:

- Dogwood (*Cornus florida*)
- Flowering Dogwood (*Cornus florida*)
- Kousa Dogwood (*Cornus kousa*)
- Occasionally other hardwood trees

Life Cycle:

The life cycle of the pathogen starts as a single spore. Starting next to the spore, the spore germinates and starts to make the leaves spots, eventually spreading to the flowering parts and over the trunk of the tree. Eventually, the tree starts to see the effects of the disease.

Global Distribution:

It is mostly found along the Pacific and Atlantic coasts of the US, with some cases found on the Pacific coast in Canada.

Environmental Factors:

The ideal environmental conditions for this pathogen are in coastal regions. Hardwood trees, it is also most prevalent in wet regions, or during wetter months.

Discovery:

It was first reported in 1979 when infected trees in Vancouver, Canada started appearing up an time went on, especially in regions on the western and Eastern coasts.

Transmission:

This is a long existing disease that can last multiple seasons/years. The cases have been decreasing with greater knowledge of treatments, resistant strains, and the implementation of prevention strategies.

Disease Patterns:

The disease is very prevalent in the regions that it exists. There are various types of Dogwood that are resistant, and these varieties have reduced the intensity and prevalence in recent years.

Subject Knowledge:

This is a very well studied pathogen disease, with 24 studies shown on Web of Science data in the last ten years.

Treatments:

- Raking up/removing dead and rotting leaves
- Removing trunks/branches of the tree that are currently infected
- Removing epicormic sprouts and using fungicides regularly
- Irrigation and watering techniques involving mulch and compost
- Planting resistant Dogwood varieties and hybrids

What is unknown?:

- It is not known which person exactly discovered this disease
- Why only certain species of Dogwood get infected

Interesting Facts:

- Cornus florida is the state flower of North Carolina since 1941
- There are up to 15 species of Dogwood identified worldwide, but many of these are resistant to infection
- Dogwood "flowers" are not botanically considered flowers, they are called bracts
- The leaves of dogwood plants decompose very quickly, making it great for the soil—as long as they are not infected

Symptoms:

Leaf and flower spotting/rotting
Cankers can form on the trunks of the tree, and eventually rot away at the roots
Can result in the tree eventually dying or parts dying

Rift Valley Fever Virus

Symptoms:

Rift Valley Fever (RVFV) virus is a negative sense, single stranded RNA virus. Only one serotype is recognized but varying extent of variable virulence.

Hosts:

Primary Reservoir: Domestic Ruminants
Virus: Rift Valley Fever Virus

Past Outbreaks:

Global Distribution: Africa, Middle East, Asia, Australia

Prevalence:

Transmission:

ENVIRONMENTAL FACTORS

Interesting Facts:

- The genome of the Rift Valley Fever Virus (RVFV) is approximately 11 kb in length and contains 10 genes.
- RVFV is a zoonotic pathogen that can cause disease in humans and animals.
- The virus is most commonly transmitted by mosquitoes.

Treatments & Vaccinations:

The vaccines are currently available for human and animals. However, there are some concerns about the safety and efficacy of the vaccines. The vaccines are currently available for human and animals.

Prevention & Control:

- Avoiding the presence of ticks and mosquitoes
- Using protective clothing and gear
- Avoiding contact with blood and tissues of infected animals
- Using insect repellent
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Mild Form of RVFV:

Severe Forms of RVFV:

Global Distribution:

Notes:

- RVFV is a highly contagious virus that can cause a variety of diseases in humans and animals.
- It is most commonly found in Africa and the Middle East.
- The virus can survive in the environment for up to 10 months.