

Bagworms

Thyridopteryx ephemeraeformis

Symptoms & Damage

- Irregular defoliation from caterpillar feeding; heavy infestations can completely strip branches.
- Presence of spindle-shaped, silk and debris-covered bags hanging from branches.
- Damage weakens trees and shrubs, reducing growth and vigor.

Cause

- Larvae hatch from eggs laid inside maternal bags in late spring.
- Caterpillars construct protective bags from silk and plant material as they feed.
- Full-grown larvae pupate inside bags and emerge as moths to continue the cycle.

Prevention & Cultural Controls

- Hand-remove and destroy bags during late fall, winter, or early spring before larvae hatch.
- Encourage natural predators such as birds and parasitic wasps.
- Maintain healthy plants through proper watering and fertilizing.

Treatment Options

- **Organic Solutions**
 - Bacillus thuringiensis (Bt) sprays targeting young larvae in early summer.
 - Spinosad sprays as an effective organic insecticide option.
- **Chemical Treatments**
 - Use insecticides containing bifenthrin, carbaryl, or permethrin when larvae are small.
 - Apply treatments early in the season before larvae fully develop inside bags.
- **Best Time to Treat**
 - Late May to early July when larvae are small and actively feeding outside bags.
 - Late fall or winter for manual removal of bags before eggs hatch.

Plant(s) Affected

- Juniper, arborvitae, spruce, pine, deciduous trees and shrubs.

Additional Notes

- Bagworm populations can build quickly if not managed.
- Regular monitoring and early intervention are key to effective control.

