FIELD GUIDE TO PLANT BULLIES

by Inna Alesina

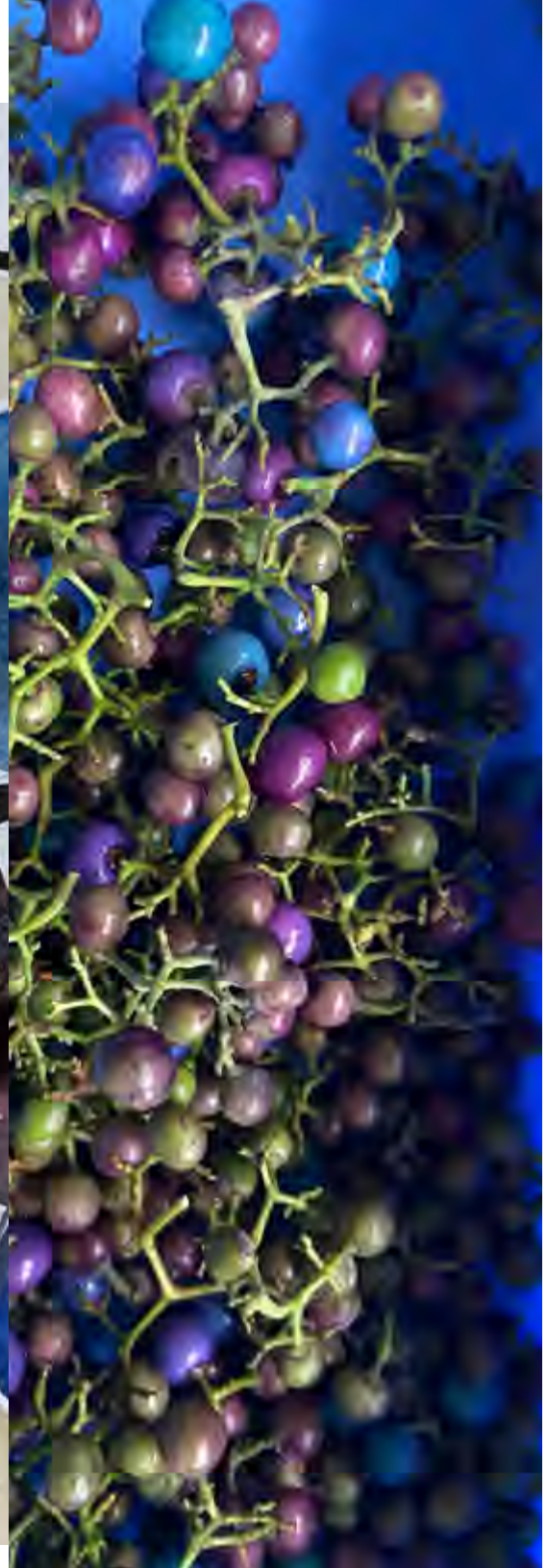
"Paying attention is a form of reciprocity with the living world"

— Robin Wall Kimmerer, the author of *Braiding Sweetgrass Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*

This Field guide will help you pay attention. It will help you learn what invasive plant (plant bully) looks like. If you can identify these plants, you can help to eradicate them or slow their encroachment on native plants, which are our best choice for supporting biodiversity.

— Inna Alesina

FIELD GUIDE:

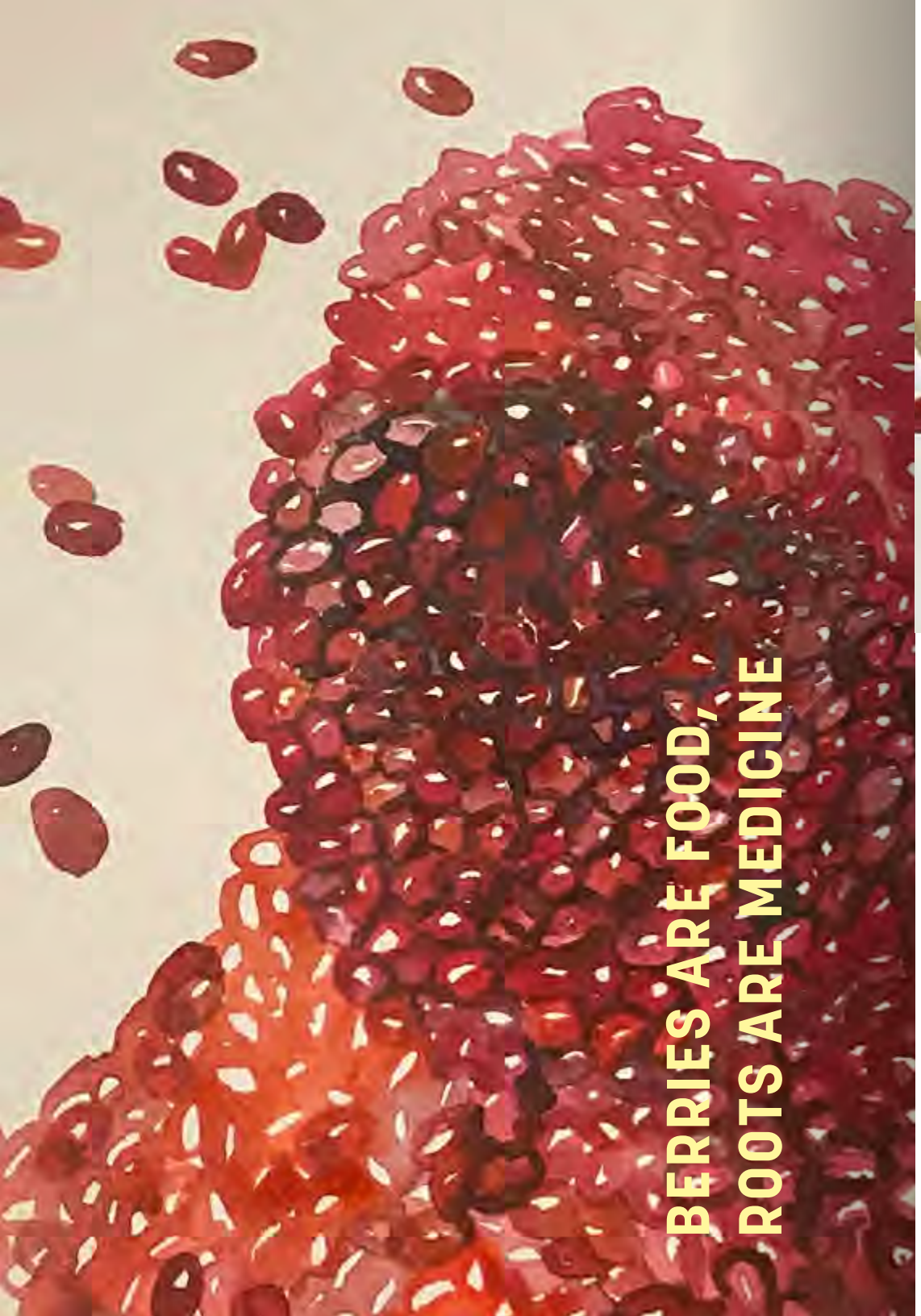


PORCELAIN BERRY
AMPELOPSIS BREVIPEDUNCULATA

ECOLOGICAL THREAT

Porcelain-berry is a vigorous invader of open and wooded habitats. It grows and spreads quickly in areas with high to moderate light. As it spreads, it climbs over shrubs and other vegetation, shading out native plants and consuming habitat.

https://www.invasive.org/weedcd/pdfs/wgw/porcelainberry.pdf

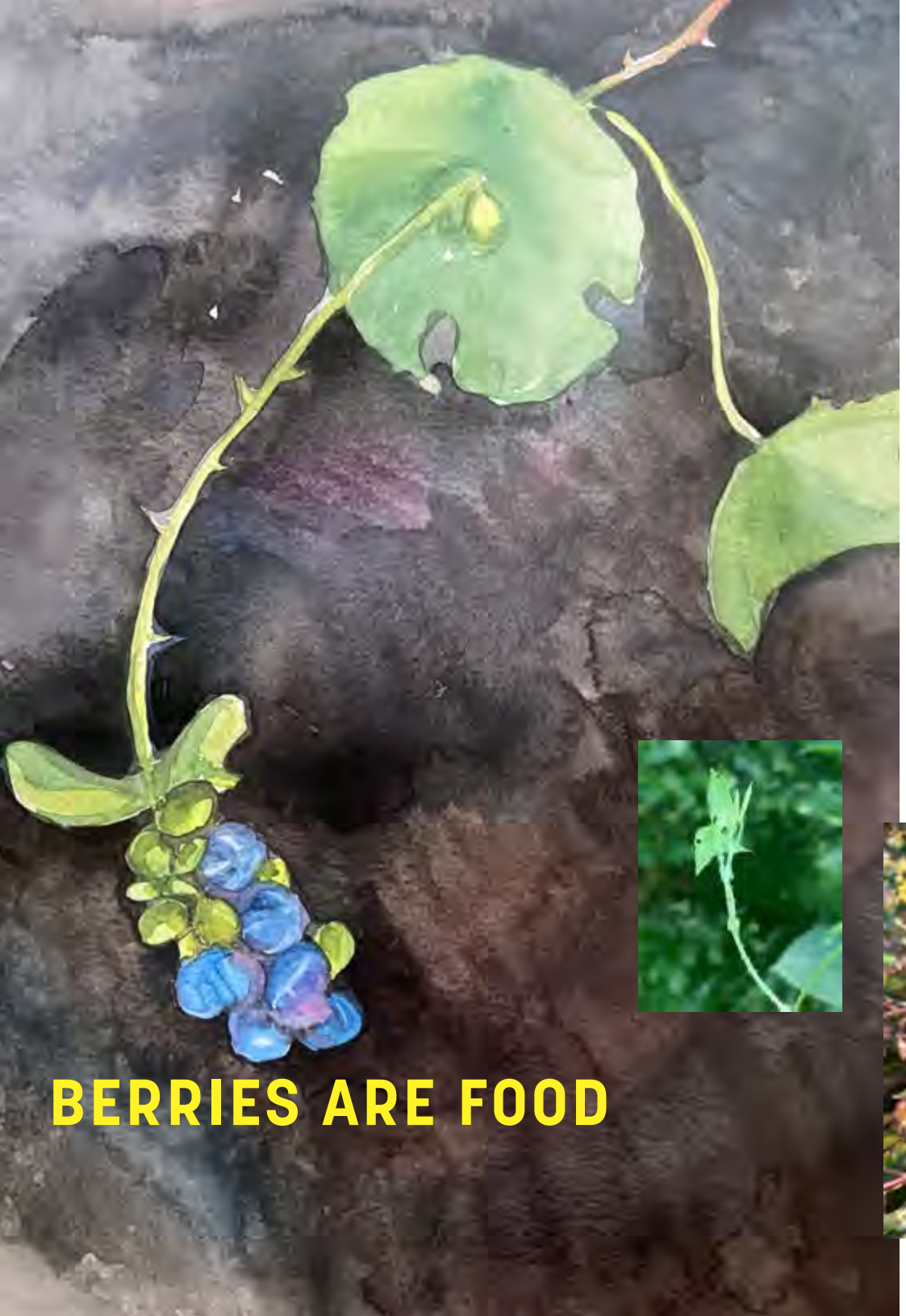


JAPANESE BARBERRY
BERBERIS THUNBERGII

ECOLOGICAL THREAT

Where it is well established, barberry displaces many native herbaceous and woody plants. In large infestations, its leaf litter causes changes in the chemistry of the soil, making it more basic.

https://www.invasive.org/alien/pubs/midatlantic/beth.htm



MILE-A-MINUTE WEED
POLYGONUM PERFOLIATUM

ECOLOGICAL IMPACT

Mile-a-minute weed grows rapidly, scrambling over shrubs and other vegetation, blocking the foliage of covered plants from available light, and reducing their ability to photosynthesize, which stresses and weakens them. It is a threat to forest regeneration and infests recreational and residential areas

https://www.invasive.org/weedcd/pdfs/wow/mile-a-minute_weed.pdf

JAPANESE HONEYSUCKLE
LONICERA JAPONICA

ECOLOGICAL THREAT

It is a fast-growing vine that twines around stems of shrubs, herbaceous plants and other vertical supports. In full sun it forms large tangles that smother and kill vegetation. It can kill shrubs and saplings by girdling. https://www.invasive.org/alien/pubs/midatlantic/loja.htm

BLOSSOMS ARE FOOD

JAPANESE KNOTWEED
FALLOPIA JAPONICA

Japanese knotweed grows in dense stands and reaches incredible heights very quickly. This makes it almost impossible for herbivores to feed on or trample it to keep it under control. In addition, its fruits are very small and easily spread by waterways and the wind. It is often still planted in gardens by those who are unaware of the damage it can cause, making management a continuous battle.

Like most invasive species, Japanese knotweed is detrimental to its surrounding environment. Growth of new stands blocks out sunlight for native plants below, and since the weed must grow very quickly to do this, it consumes large amounts of minerals and nutrients from the soil. This limits the resources available to nearby species, wiping them out. All this limits biodiversity, which is one of the main reasons that Japanese knotweed is so undesirable.

https://www.nps.gov/articles/000/japanese-knotweed-acadia.htm

CHINESE WISTERIA
WISTERIA SINENSIS

ECOLOGICAL THREAT

Wisteria sinensis can displace native vegetation and kill trees and shrubs by girdling them. The vine has the ability to change the structure of a forest by killing trees and altering the light availability to the forest floor. A native of China, it was first introduced into the United States in 1816 for ornamental purposes.

https://www.invasiveplantatlas.org/subject.html?sub=3083

AUTUMN OLIVE
ELAEAGNUS UMBELLATE

BERRIES ARE FOOD

ECOLOGICAL THREAT

Elaeagnus umbellata invades old fields, woodland edges, and other disturbed areas. It can form a dense shrub layer which displaces native species and closes open areas. Elaeagnus umbellata is native to China and Japan and was introduced into North America in 1830. Since then, it has been widely planted for wildlife habitat, mine reclamation, and shelterbelts. It is a non-leguminous nitrogen fixer.

https://www.invasive.org/browse/subinfo.cfm?sub=3021

ORIENTAL BITTERSWEET
CELASTRUS ORBICULATUS

ECOLOGICAL THREAT

Oriental bittersweet is a vigorous growing plant that threatens native vegetation from the ground to the canopy level. Thick masses of vines sprawl over shrubs, small trees and other plants, producing dense shade that weakens and kills them. Shrubs and trees can be killed by girdling and by uprooting as a result of excessive weight of the vines. In the Northeast, Oriental bittersweet appears to be displacing the native American bittersweet (Celastrus scandens) through competition and hybridization.

https://www.invasive.org/alien/pubs/midatlantic/ceor.htm

ENGLISH IVY
HEDERA HELIX

ECOLOGICAL THREAT

English ivy is an aggressive invader that threatens all vegetation levels of forested and open areas, growing along the ground as well as into the forest canopy. Vines climbing up tree trunks spread out and envelop branches and twigs, blocking sunlight from reaching the host tree's foliage, thereby impeding photosynthesis. An infested tree will exhibit decline for several to many years before it dies. The added weight of vines also makes trees susceptible to blowing over during storms. English ivy has been confirmed as a reservoir for bacterial leaf scorch (Xylella fastidiosa), a harmful plant pathogen that affects a wide variety of native and ornamental trees such as elms, oaks and maples.

https://www.invasive.org/alien/pubs/midatlantic/hehe.htm

MULTIFLORA ROSE
ROSA MULTIFLORA

ECOLOGICAL THREAT

Multiflora rose grows aggressively and produces large numbers of fruits (hips) that are eaten and dispersed by a variety of birds. Dense thickets of multiflora rose exclude most native shrubs and herbs from establishing and may be detrimental to nesting of native birds.

https://www.invasive.org/alien/pubs/midatlantic/romu.htm

POKEWEED
PHYTOLACCA AMERICANA

American Pokeweed, or Phytolacca americana, is attractive, poisonous, and a popular edible potherb with a long list of historical uses.

Both are true. All parts of the fresh pokeweed plant are poisonous and if eaten can cause severe symptoms and even death. However, the young tender greens, when cooked properly, can be eaten as a vegetable.

Some people also cook the ripe purple berries for pies. In addition to being poisonous, this weed can be very invasive.

https://www.baltimoresun.com/news/bs-xpm-2002-05-05-0205050378-story.html

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TREE OF HEAVEN
AILANTHUS ALTISSIMA

Tree-of-heaven has been receiving a significant amount of attention lately, and not just because it is a fast-spreading invader of woodlands throughout the mid-Atlantic states and beyond. It is currently found in at least one area in almost every state in the U.S., with its greatest density in the middle lattitudes from the Atlantic Ocean to the Mississippi River.

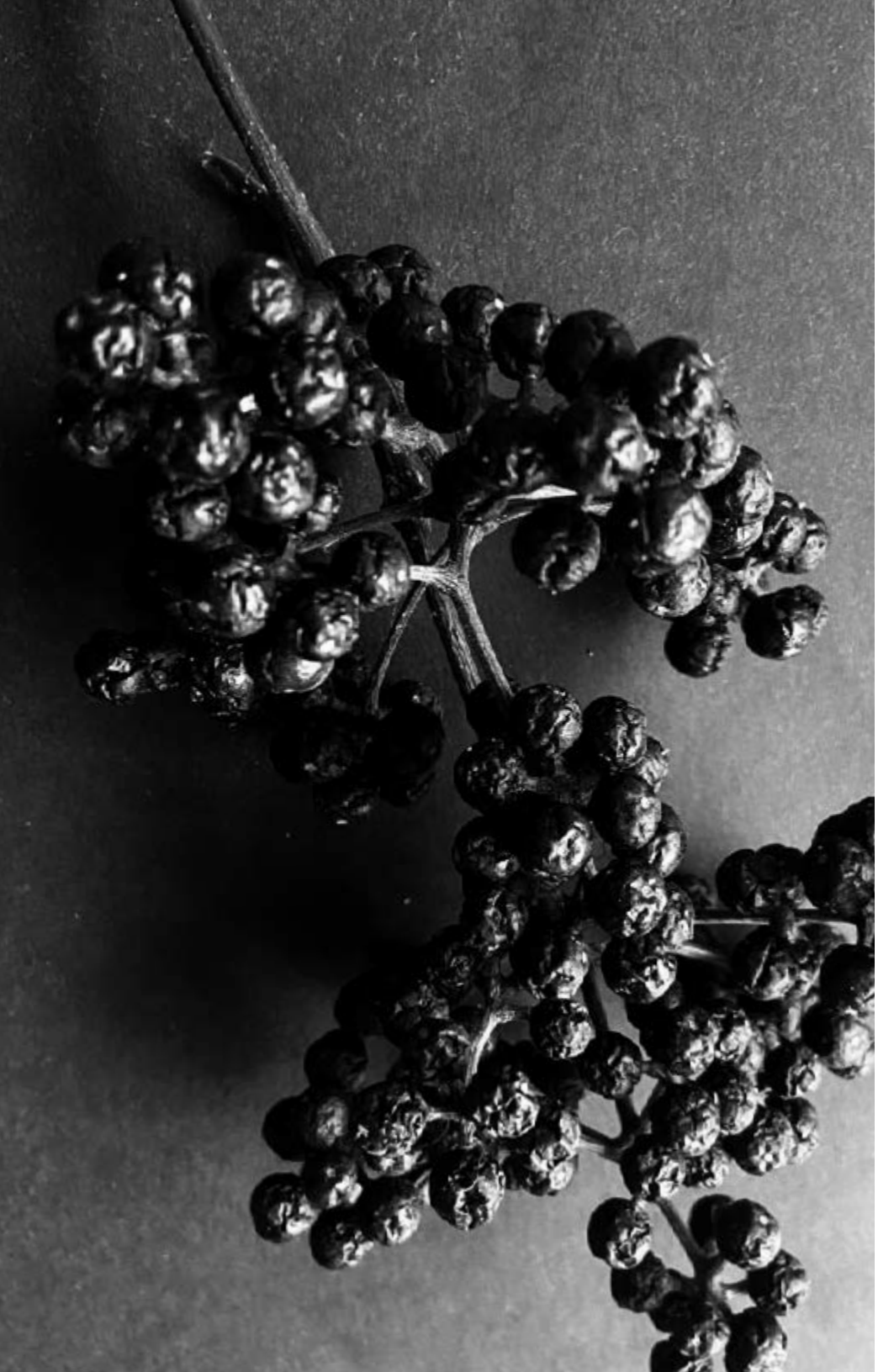
Both forestry and invasive plant species specialists have advocated for the control and removal of tree-of-heaven for many years, but the recent discovery of a new invasive insect in Pennsylvania, and its subsequent spread into adjoining areas, has lent new voice to advocates for the plant's removal.

The insect, Spotted Lanternfly, is a recent arrival from Asia. The insect has discovered a variety of native North American tree species on which to feed, but researchers have discovered that tree-of-heaven is the insect's preferred host. This has led to an increased movement to remove tree-of-heaven from the landscape.

For property owners with tree-of-heaven in their woodlands, it is important to understand the plant's origins and ways that it can be controlled. This is essential not just for the health of the woodlands, but to help curb the spread of Spotted Lanternfly.

https://extension.umd.edu/resource/invasives-your-woodland-tree-heaven-ailanthus

Spotted Lanternfly



AMUR CORK TREE
PHELLODENDRON AMURENSE

ECOLOGICAL THREAT:

Suppresses regeneration of native tree species and displaces native shrub and herbaceous layers.

Research shows decreases in acorn and hickory nut production as well as overall tree populations where Amur cork tree is present.

Adaptable to different soil types (clays to sands), acidic to alkaline, but prefers moist, well-drained soils.

Grows in both full sun and under dense shade.

Reproduces by both seeds and by resprouting from stumps. A female tree can produce thousands of seeds.

Allelopathic; chemical exudates alters soil microorganisms and surrounding vegetation.

Grown throughout the United States; tolerant of urban areas (pollution, parking lots, golf courses, highway medians).

https://dnr.wisconsin.gov/topic/Invasives/fact/AmurCorkTree.html

BERRIES ARE FOOD & MEDICINE

LINDEN VIBURNUM

VIBURNUM DILATATUM

ECOLOGICAL THREAT

Shrubs can grow over 15 ft. high in thickets that cast dense shade, suppressing native shrubs, small trees and herbaceous vegetation. A dense cover of young plants produced from seed and vegetative re-growth often blankets the ground in infested areas. Linden viburnum leafs out earlier in the spring and keeps its leaves later into the fall than most native vegetation, giving it a competitive advantage.

https://www.invasive.org/alien/pubs/midatlantic/vidi.htm

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