

DRAFT WRITTEN FINDINGS OF THE WASHINGTON STATE NOXIOUS WEED CONTROL BOARD

SCIENTIFIC NAME: *Robinia pseudoacacia*

SYNONYMS: *Robinia pseudoacacia* var. *rectissima* (USDA)

COMMON NAMES: Black locust, false acacia, yellow locust, (invasive.org)

FAMILY: Pea family, fabaceae

LEGAL STATUS: On our monitor list since May 2025, considered for Class C listing.

DESCRIPTION AND VARIATION

OVERALL HABIT:

Robinia pseudoacacia is typically a medium-sized, fast-growing, deciduous tree, though it can sometimes present as a large shrub (Bakewell-Stone, 2025; Wolmarans, 2023; Kato-Noguchi & Kato, 2024). It is recognized as a pioneer species, adept at colonizing open and disturbed areas (Sádlo *et al.*, 2017). Trees commonly reach heights of 10–30 meters (Kato-Noguchi & Kato, 2024), with a typical lifespan of 60–100 years (Kato-Noguchi & Kato, 2024). In favorable conditions, it grows as an upright, single-stemmed tree but can become a multi-stemmed, shrub-like plant in harsh environments or after being damaged (Sádlo *et al.*, 2017).



Adult trees. Oregon State University.

STEMS:

The stem of the black *Robinia pseudoacacia* can be bent or upright, occurring as either a single or multi-stemmed tree (Kato-Noguchi & Kato, 2024). The bark on young trees is smooth, becoming greyish-brown to dark brown and deeply, longitudinally fissured with age, often forming a diamond pattern and

sometimes showing reddish-orange hints in the grooves (Kato-Noguchi & Kato, 2024; Wolmarans, 2023; Bakewell-Stone, 2025). Twigs are armed with paired spines at the points where leaves attach (nodes), which are modified stipules (small leaf-like appendages at the base of a leaf stalk) and can be up to 2 cm long; these spines become more prominent after disturbance (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Wolmarans, 2023). Young twigs are often puberulent (covered with short, soft hairs) and angled (Bakewell-Stone, 2025). The wood is dense, strong, and highly resistant to rot, particularly the inner heartwood. This is due to its high concentration of phenolic compounds and flavonoids, which are natural defensive chemicals (Dünisch *et al.*, 2010; Keresztesi, 1983). Juvenile wood (formed in the first 10-20 years) is less durable than the mature heartwood of older trees (Dünisch *et al.*, 2010).



Aged bark and thorn. Oregon State University.

LEAVES:

The leaves are alternate, deciduous, and compound, specifically imparipinnate (odd-pinnately compound, meaning they have a single terminal leaflet at the end). Each leaf is 10–45 cm long (Bakewell-Stone, 2025; Wolmarans, 2023; Kato-Noguchi & Kato, 2024). A leaf consists of 3–25 leaflets



Leaves composed of leaflets. Oregon State University.

(Kato-Noguchi & Kato, 2024), typically 7–21 (Bakewell-Stone, 2025), arranged in pairs on either side of the central leaf stalk (rachis), with a terminal leaflet. Individual leaflets are oblong, elliptic, or oval, 2–5 cm long, with an smooth margin, dull dark green on the upper surface and paler beneath (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024). The tree exhibits phenotypic plasticity and nyctinasty by adjusting the angle of its leaflets to maximize sun exposure in low light and minimize it in excessively bright,

hot conditions to avoid damage (Wang *et al.*, 2021).

FLOWERS:

Robinia pseudoacacia produces highly fragrant, white to cream-colored flowers, often with yellow spots inside (Bakewell-Stone, 2025; Wolmarans, 2023; Kato-Noguchi & Kato, 2024). These flowers possess both male and female reproductive organs, and are arranged in pendulous racemes (unbranched, elongated flower clusters) that are 10–20 cm long (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Wolmarans, 2023). The tree is predominantly cross-fertilized, mainly by insects such as bees (Kato-Noguchi & Kato, 2024; Wolmarans, 2023).



Above: Racemes of flowers and a close up of a flower. Oregon State University.

Below: Ripened seed pods. Oregon State University.

FRUITS/SEEDS:

The fruit is a legume pod, flattened and oblong, 5–12 cm long. It is dark brown with a reddish tint and has a narrow wing along one edge (Bakewell-Stone, 2025; Wolmarans, 2023; Kato-Noguchi & Kato, 2024). Each pod contains 2–15 brown to dark brown, hard-coated, kidney-shaped seeds (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024). *Robinia pseudoacacia* begins seed production from 5–6 years of age, with good seed crops occurring every one to two years (Kato-Noguchi & Kato, 2024; Keresztesi, 1983). A single tree can produce 6–12 kg of seeds annually (Kato-Noguchi & Kato, 2024).

Seed dispersal is primarily by gravity and wind over short distances. Longer distance dispersal can occur via floating pods



on water, ingestion and dispersal by birds and pigs, and unintentionally by human activities (Bakewell-Stone, 2025; Wolmarans, 2023; Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017).

ROOTS:

Robinia pseudoacacia typically develops a shallow, wide-spreading, fibrous root system, which is excellent for soil binding. However, it is also capable of producing deep roots, extending 5–7 meters or more, particularly in dry conditions (Bakewell-Stone, 2025; Dünisch *et al.*, 2010; Kato-Noguchi & Kato, 2024). Horizontal roots can extend radially about 1 to 1.5 times the tree height and have been recorded to grow 1.6 meters per year, reaching up to 61 meters from the parent tree (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024). A key feature is its ability to produce root suckers, which is a primary mode of vegetative spread, especially following disturbance, which allow it to form dense, interconnected thickets (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017; Wolmarans, 2023). Mother plants support these suckers with nutrients for several years (Kato-Noguchi & Kato, 2024). The roots form symbiotic relationships with nitrogen-fixing bacteria, primarily of the genus *Mesorhizobium*, in structures called root nodules. This allows the tree to convert atmospheric nitrogen into a usable form (Kato-Noguchi & Kato, 2024; Nicolescu *et al.*, 2020). It also associates with arbuscular mycorrhizal fungi, which can enhance nutrient and water uptake (Kato-Noguchi & Kato, 2024).

SIMILAR SPECIES:

Tree-of-heaven (*Ailanthus altissima*) also have drooping bunches of white flowers, but tree-of-heaven flowers are much smaller and look more like stars than like pea flowers. Tree-of-heaven leaflets have pointed tips and small glands on the bases (Burke Herbarium).

Honey locust (*Gleditsia triacanthos*) only grow in a few locations in South East Washington. Honey locust leaflets have pointed tips (Burke Herbarium).



Black locust (*Robinia pseudoacacia*) leaves and flowers.
Oregon State University.

Ashes (*Fraxinus sp.*) leaflets have pointed tips and are generally much larger than black locust leaflets. Ash flowers are pale green-yellow drooping catkins, and not showy flowers. The seeds are papery samaras (winged seeds) with only one seed per fruit (Burke Herbarium).

Mountain ashes (*Sorbus sp.*) leaflets have serrated edges. Their flowers have 5 white petals, and are generally small. The fruits are round, hard, frequently orange and red, berries. When fully grown, they are only the size of a small tree (Burke Herbarium).

Elderberries (*Sambucus sp.*) leaflets have serrated edges. Their tight bunches of flowers are composed of many small 5-petaled flowers. They produce small blue, black, and red berries, depending on species. When fully grown, they are usually only the size of a large shrub (Burke Herbarium).

Sumacs (*Rhus sp.*) leaflets have serrated edges. They grow tight cones of flowers, and the fruits are very small and generally red. When fully grown, they are usually shrub sized (Burke Herbarium).

Walnuts (*Juglans sp.*) leaflets are generally very lightly serrated, and have pointed tips. The flowers are dangling green catkins, and the fruits are large, hard, rounded, walnuts that start green and age to brown or black (Burke Herbarium).

HABITAT:

In its native range, *Robinia pseudoacacia* is found along forest edges and on slopes in the Southern Appalachian and Ozark mountains (Bakewell-Stone, 2025; Wolmarans, 2023; Huntley 1990, cited in Boring & Swank, 1984).

As an introduced species, it colonizes a wide array of habitats. It's an early successional species that thrives in open, disturbed sites, including grasslands, semi-natural woodlands, urban and industrial wastelands,

riverbanks, roadsides, and

mining spoils (Bakewell-Stone, 2025; Wolmarans, 2023; Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017; Vítková *et al.*, 2020). It generally avoids wet, compacted, very acidic, or saline soils (Kato-Noguchi & Kato, 2024; Nicolescu *et al.*, 2020), preferring moist, rich, loamy soils, particularly those of limestone origin (Bakewell-Stone, 2025; Huntley 1990, Keresztesi, 1983). It is a light-demanding pioneer species (Sádlo *et al.*, 2017).

Climatically, its native range is humid and moderate. However, in its introduced ranges, it tolerates temperatures from approximately -8°C to 38°C and can grow in semi-arid to temperate regions with hot summers (Bakewell-Stone, 2025; Humphrey *et al.*, 2019; Kato-Noguchi & Kato, 2024; Nicolescu *et al.*, 2020). Soil pH tolerance is broad, from 3.2 to 8.2 (Kato-Noguchi & Kato, 2024). Ongoing climate warming



Tree on a roadside. Jan Samanek, Phytosanitary Administration.

is expected to favor its occurrence and facilitate further range expansion, particularly eastward and northward in Europe (Puchałka *et al.*, 2021; Sádlo *et al.*, 2017).

BIOLOGY

GROWTH AND DEVELOPMENT:

Robinia pseudoacacia is characterized by rapid early growth. Seedlings can reach 8–10 cm in two months, and annual height growth can be between 0.46 to 1.22 meters in young trees (Kato-Noguchi & Kato, 2024; Sabo, 2000, cited in Bakewell-Stone, 2025). However, this rapid growth phase typically slows after 10–20 years (Boring & Swank, 1984). Seedling establishment is most successful in high-light conditions (Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017). It is generally shade intolerant, especially in the seedling stage, though root suckers, being connected to the parent plant, show greater shade tolerance (Bakewell-Stone, 2025; Huntley 1990, cited in Puchałka *et al.* 2021; Sabo, 2000). The species reaches reproductive maturity earlier than many native trees (Sádlo *et al.*, 2017). It commonly forms dense, monodominant stands due to its vigorous suckering and fast growth (Wolmarans, 2023; Vítková *et al.*, 2020). In plantations, tree density dynamics show an initial decrease due to mortality, followed by an increase as root suckers develop, and a subsequent decline in older stands as self-thinning occurs (Kou *et al.*, 2016). Both tree height and diameter at breast height generally increase with stand age (Kou *et al.*, 2016). Older stands exhibit higher Water Use Efficiency, particularly in wetter years, while younger stands are more sensitive to variations in precipitation (Wang *et al.*, 2021).



Steve Hurst. USDA NRCS Plants Database.

REPRODUCTION:

Robinia pseudoacacia reproduces both sexually, via seeds, and asexually (vegetatively), primarily through root suckers and also by stump sprouts (Bakewell-Stone, 2025; Wolmarans, 2023). Vegetative reproduction is the dominant mode of spread, especially following disturbance to the parent tree or roots (Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017; Wolmarans, 2023).

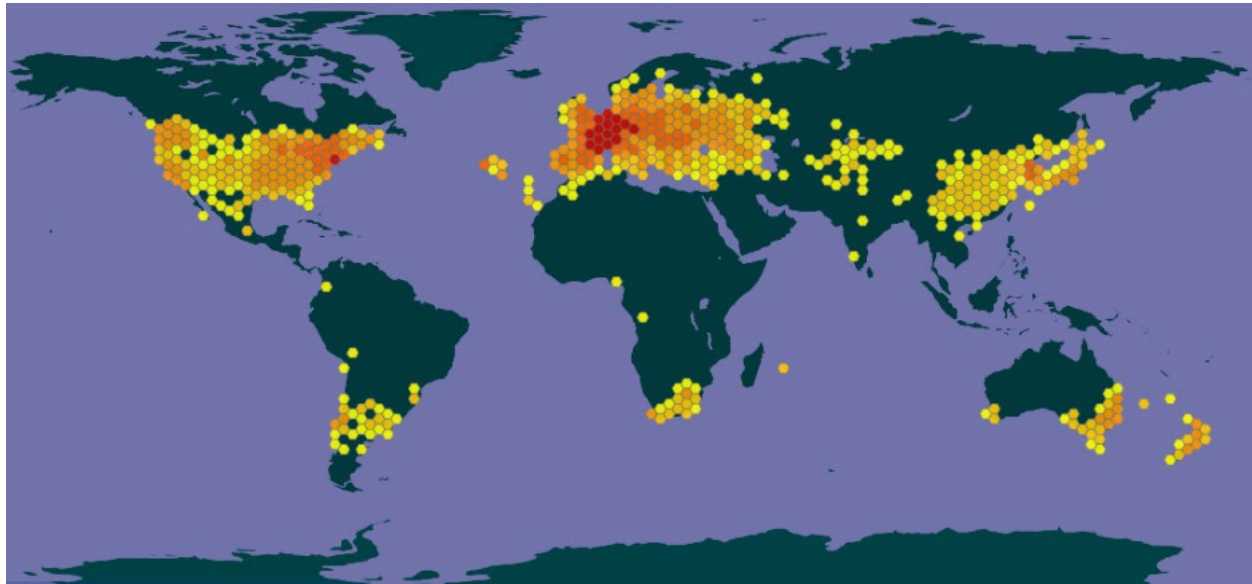
Seeds exhibit physical dormancy due to their hard, impermeable seed coat, resulting in naturally low germination rates (3.5–22%) (Kato-Noguchi & Kato, 2024; Bouteiller *et al.*, 2021). Germination can be significantly enhanced by various scarification methods (breaking the seed coat), including fire, mechanical abrasion, chemical treatment (e.g., sulfuric acid), or thermal shock (Bouteiller *et al.*, 2021; Kato-Noguchi & Kato, 2024; Wolmarans, 2023). Notably, invasive European populations have shown inherently higher germination rates than native American populations (Bouteiller *et al.*, 2021). Seeds can remain viable in the soil for extended periods, from 10 to over 40 years, forming a persistent seed bank

(Kato-Noguchi & Kato, 2024). In South Africa, seed predation by generalist insects and mice has been observed (Wolmarans, 2023)

GEOGRAPHIC DISTRIBUTION

NATIVE DISTRIBUTION

The native range of *Robinia pseudoacacia* is confined to two separate regions in the eastern United States: a larger area centered on the Appalachian Mountains and a smaller area on the Ozark Plateau of Missouri, Arkansas, and Oklahoma (Bouteiller *et al.*, 2021; Huntley, 1990).



World-wide distribution. Global Biodiversity Information Facility.

NON-NATIVE DISTRIBUTION

It is widespread across Europe, Asia, southern Africa, Australia, and New Zealand (CABI; Sádlo *et al.*, 2017). In Hungary and Romania, it is a dominant feature of the landscape, covering approximately 23% and 4% of the total forested land, respectively (Nicolescu *et al.*, 2020). Its distribution in Europe is well-documented, occupying various habitats from the Mediterranean coast to Central and Eastern Europe (Puchałka *et al.*, 2021). In South Africa, it is present in all nine provinces, with the potential to invade up to 62% of the country's land area (Humphrey *et al.*, 2019; Wolmarans, 2023).

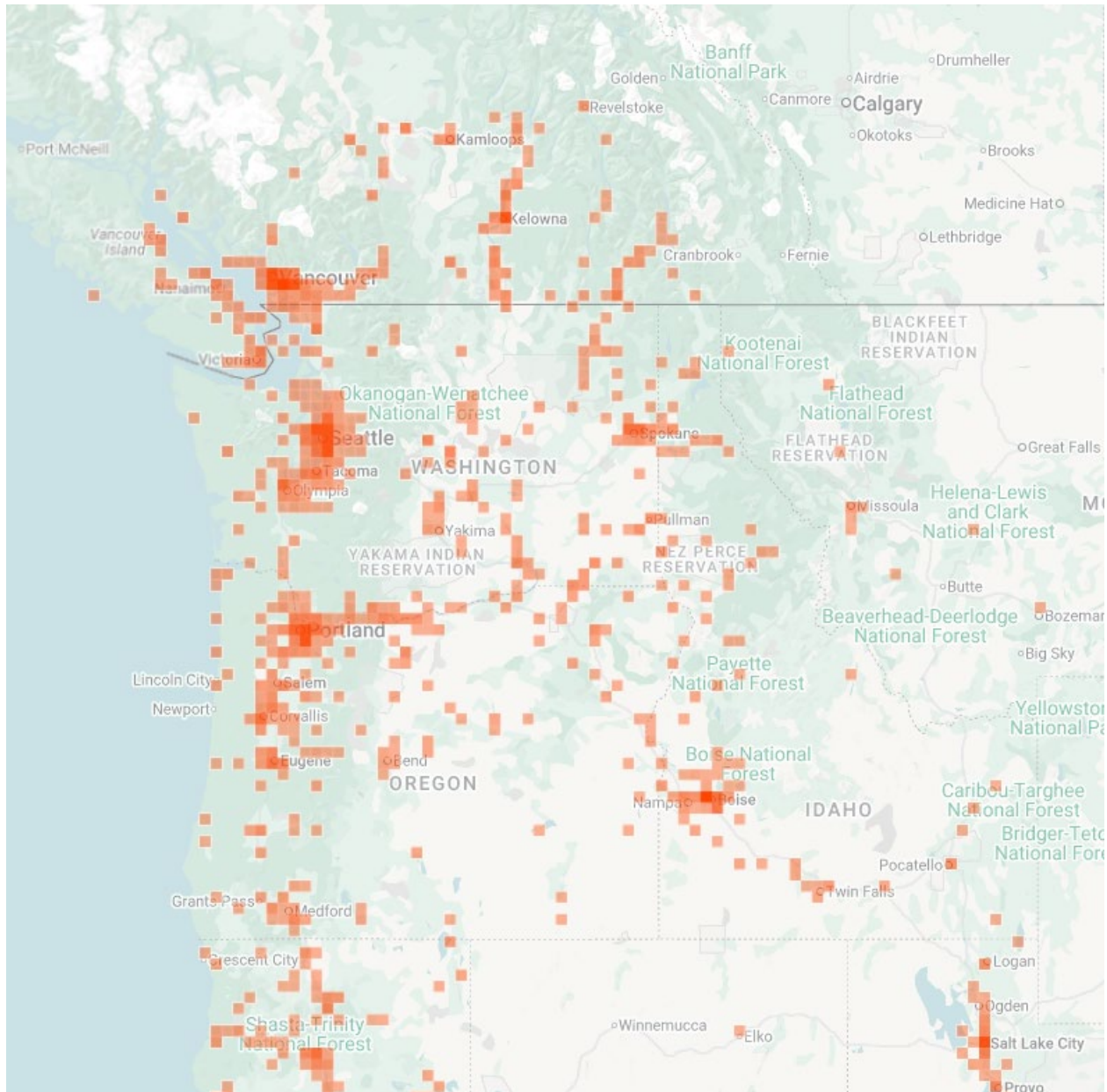
HISTORY:

Since its introduction to Europe in the early 1600s, *Robinia pseudoacacia* has become one of the most widely planted broadleaved trees globally (Nicolescu *et al.*, 2020; Keresztesi, 1983). Genetic research suggests that the European invasive populations originated from just a few source populations within the northern Appalachian region (Bouteiller *et al.*, 2019).

The earliest record of *R. pseudoacacia* in the Pacific Northwest is from Whitman County, Washington, in 1893 (Consortium of Pacific Northwest Herbaria).

WASHINGTON:

Robinia pseudoacacia is known throughout Washington, in forested, open, remote, and urban areas around Eastern and Western Washington. It is not found at higher altitudes in the Olympics or Cascades, and not frequently found near the Pacific Coast (Burke Herbarium; Consortium of Pacific Northwest Herbaria; iNaturalist)



Sightings on iNaturalist throughout the Pacific Northwest.

NEARBY TO WASHINGTON:

OREGON:

Similar to Washington, *Robinia pseudoacacia* is found throughout Oregon in a wide variety of habitats and locations (Consortium of Pacific Northwest Herbaria; iNaturalist)

IDAHO:

Robinia pseudoacacia is found throughout Idaho in a wide variety of habitats and locations (Consortium of Pacific Northwest Herbaria; iNaturalist.)

BRITISH COLUMBIA:

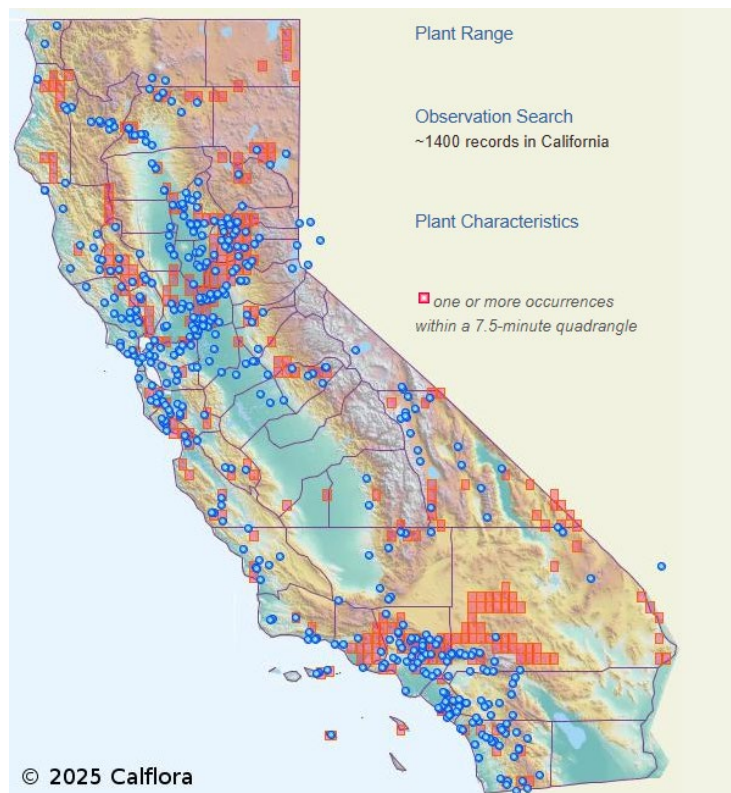
Robinia pseudoacacia is found throughout southern British Columbia, from Vancouver Island to Cranbrook and north to Revelstoke (Consortium of Pacific Northwest Herbaria; iNaturalist).

CALIFORNIA

Robinia pseudoacacia has reports and infestations throughout the entirety of California (Calflora).

LISTINGS:

Robinia pseudoacacia is listed as invasive in Oregon, Minnesota, Wisconsin, and several states in New England. It is considered invasive in California, Michigan, and a few other states in New England (EDDMapS). Australia (Weeds Australia), New Zealand (New Zealand Plant Conservation Network), South Africa (Invasives South Africa), and several European countries (Sitzia, *et al.*, 2016) consider it as invasive or have it listed on a legal list.



Observations on Calflora.

ECONOMIC AND ECOLOGICAL IMPORTANCE

DETRIMENTAL:

Robinia pseudoacacia reduces livestock grazing capacity in invaded rangelands, leading to significant potential economic losses. In South Africa, for example, the impact on the livestock sector could be between R130 million and R676 million per annum (Humphrey *et al.*, 2019). All parts of the plant (bark, leaves, seeds) are poisonous to livestock, particularly horses, potentially leading to veterinary costs or

loss of animals (Bakewell-Stone, 2025; Humphrey *et al.*, 2019; Kato-Noguchi & Kato, 2024; Keresztesi, 1983).

R. pseudoacacia forms dense, often monodominant, stands that outcompete and displace native plant species, leading to a reduction in local biodiversity and homogenization of plant communities (Bakewell-Stone, 2025; Benesperi *et al.*, 2012; Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017; Vítková *et al.*, 2020; Wolmarans, 2023). Particularly threatening to dry and semi-dry grasslands (Sádlo *et al.*, 2017; Vítková *et al.*, 2020). Its nitrogen-fixing ability significantly increases soil nitrogen levels, which can alter nutrient cycling and favor nitrogen-loving and weedy species at the expense of native nutrient-poor adapted and acid-loving species (Boring & Swank, 1984; Kato-Noguchi & Kato, 2024; Papaioannou *et al.*, 2016; Sádlo *et al.*, 2017; Staska *et al.*, 2014). It can also increase soil organic carbon, alter soil pH, and affect phosphorus availability (Kato-Noguchi & Kato, 2024; Rahmonov, 2009; Sádlo *et al.*, 2017). Increased soil nitrogen can persist even after *R. pseudoacacia* removal (Kato-Noguchi & Kato, 2024). Dense canopies alter the light regime in the understory, reducing light availability for native plants (Kato-Noguchi & Kato, 2024; Kou *et al.*, 2016; Vítková *et al.*, 2020). They are known to produce allelochemicals (e.g., robinetin, myricetin, quercetin, gentisic acid, vanillic acid) that can inhibit the germination and growth of neighboring plants (Kato-Noguchi & Kato, 2024; Nasir *et al.*, 2005). Changes in vegetation structure and food supply negatively affect native invertebrate and vertebrate communities, including birds and lichens (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017; Vítková *et al.*, 2020). It can deplete soil moisture, especially in older, denser stands, potentially forming "soil dry layers" (Kou *et al.*, 2016). It can slow down or alter natural forest succession, maintaining its dominance for longer periods in introduced ranges compared to its native range where it's an early successional species (Boring & Swank, 1984; Kato-Noguchi & Kato, 2024; Vítková *et al.*, 2020).

BENEFICIAL:

Robinia pseudoacacia provides significant economic benefits, which is the primary reason for its widespread cultivation. The wood is very durable, hard, and rot-resistant. It's used for a variety of products including fence posts, mine props, railway sleepers, furniture, flooring, paneling, tool handles, boat building, pallets, and high-quality fuelwood and charcoal (Bakewell-Stone, 2025; Dünisch *et al.*, 2010; Kato-Noguchi & Kato, 2024; Keresztesi, 1983; Nicolescu *et al.*, 2020; Sádlo *et al.*, 2017). *R. pseudoacacia* flowers are a major nectar source, producing a



Dense stand.

highly valued, light-colored honey, especially in Hungary and Romania (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Keresztesi, 1983; Nicolescu *et al.*, 2020; Sádlo *et al.*, 2017). It is grown in short-rotation coppice systems for bioenergy production (Böhm *et al.* 2009, cited in Nicolescu *et al.* 2020; Kato-Noguchi & Kato, 2024; Keresztesi, 1983). It is planted as an ornamental tree in parks and along streets, and used for shelterbelts due to its fast growth and dense canopy (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Nicolescu *et al.*, 2020; Sádlo *et al.*, 2017). Despite its toxicity, leaves are sometimes used as fodder for livestock, particularly goats, in some regions (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Keresztesi, 1983). Flowers are occasionally used for culinary purposes (Sádlo *et al.*, 2017).

It is widely planted for erosion control, stabilization of disturbed sites, and soil improvement due to its nitrogen-fixing ability (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Nicolescu *et al.*, 2020; Papaioannou *et al.*, 2016; Sádlo *et al.*, 2017). Its nitrogen-fixing capability enriches nutrient-poor soils, making it valuable for reclamation of disturbed sites like mining spoils (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Papaioannou *et al.*, 2016). It can act as a nurse crop, facilitating the establishment of other species (Kato-Noguchi & Kato, 2024). In heavily modified or agricultural landscapes, *R. pseudoacacia* stands or "islands" can sometimes increase local biodiversity by providing shelter and food for generalist fauna (Sádlo *et al.*, 2017). Older trees can also support rare saprophytic (decay-feeding) fungi (Sádlo *et al.*, 2017).

CONTROL

MECHANICAL:

Cutting down a tree or damaging its roots often stimulates a prolific sprouting response, making control difficult (Sabo, 2000; Wolmarans, 2023) without an herbicide follow-up

Hand pulling is effective for seedlings and small saplings, provided the entire root system is removed to prevent resprouting. It is not useful for established suckers due to their connection to the parent root system (Bakewell-Stone, 2025; Sádlo *et al.*, 2017; Wolmarans, 2023). Repeated cutting can eventually exhaust the plant's reserves and kill it, but this is labor-intensive and



Wood cookies made from a trunk.

often stimulates more vigorous suckering initially (Bakewell-Stone, 2025; Vítková *et al.*, 2020).

Cutting and felling, while commonly used, is not effective as it stimulates prolific sprouting from stumps and roots. It can be combined with chemical treatment for better effectiveness (Sabo 2000, Wolmarans 2023; Sádlo *et al.*, 2017; Wolmarans, 2023). Bulldozing can remove trees and roots, but is extreme and may lead to significant soil erosion and disturbance (Sabo 2000, Bakewell-Stone, 2025).

CULTURAL:

Early detection and rapid response is essential for preventing new invasions and managing existing ones before they become widespread (Sádlo *et al.*, 2017). Avoiding the deliberate planting of *Robinia pseudoacacia* in or near ecologically sensitive areas or Natura 2000 sites is a key preventative measure (Sádlo *et al.*, 2017; Vítková *et al.*, 2020). Altering rotation ages in commercial forestry, potentially lengthening them to allow native species to outcompete aging *R. pseudoacacia*, or shifting away from coppicing (which favors *R. pseudoacacia*) to high forest systems, can be part of management (Nicolescu *et al.*, 2020; Vítková *et al.*, 2020). Establishing and managing buffer zones of non-invasive vegetation around plantations can act as a biological barrier to spread (Vítková *et al.*, 2020). In fire-adapted ecosystems, prescribed burning may help manage *R. pseudoacacia* long-term, but it can initially stimulate sprouting and thus needs to be part of an integrated plan (Sabo 2000, Bakewell-Stone, 2025; Sádlo *et al.*, 2017; Wolmarans, 2023). Encouraging the growth of dense, shade-casting native trees can suppress *Robinia pseudoacacia*, which is shade-intolerant (Sádlo *et al.*, 2017). Targeted grazing by animals like goats, which can effectively control the height of sprouts (Sabo, 2000; Wolmarans, 2023).



Tree in the winter. Oregon State University.

BIOLOGICAL:

Robinia pseudoacacia is attacked by numerous insects in its native North America, such as the locust borer (*Megacyllene robiniae*) and the locust leafminer (*Odontota dorsalis*), which can cause significant damage and even tree mortality, especially on poor sites (Bakewell-Stone, 2025; Kato-Noguchi & Kato, 2024; Keresztesi, 1983). These agents are not currently used for classical biological control. Research is underway to identify and evaluate potential biological control agents, particularly leaf-feeding insects, for introduction into invaded regions like South Africa. Candidate agents under investigation include the gall midge *Obolodiplosis robiniae*, the leaf-mining moth *Macrosaccus robinella*, and the leaf-mining

beetle *O. dorsalis* (Wolmarans, 2023). Climate matching studies suggest *O. dorsalis* is a promising candidate for South Africa based on climatic suitability (Wolmarans, 2023).

CHEMICAL:

Chemical control with herbicides is currently the most effective method for controlling established *Robinia pseudoacacia*

stands. Application of a concentrated herbicide (e.g., glyphosate, triclopyr) to the freshly cut surface of stumps is a common and effective method (Sabo 2000, Wolmarans 2023; Bakewell-Stone, 2025). Herbicides like glyphosate or triclopyr can be sprayed onto the foliage of resprouts and young plants, most effectively late in the growing season (Sabo 2000, Bakewell-Stone, 2025; Wolmarans, 2023). Herbicide mixed with an oil-based carrier is applied to the lower part of the stem (typically the bottom 30–50 cm) on smaller trees (Sabo 2000, Bakewell-Stone, 2025; Wolmarans, 2023). Herbicide is injected directly into the vascular system of larger trees through drilled holes or cuts made into the trunk (Sabo 2000, Wolmarans 2023; Sádlo *et al.*, 2017).



Flowering tree. Oregon State University.

Triclopyr is effective on broad-leaved plants. Aminopyralid, which is lethal to legumes, can be particularly advantageous for controlling *R. pseudoacacia* (Wolmarans, 2023). Picloram is generally discouraged due to its high mobility and persistence in soil (Sabo 2000, Bakewell-Stone, 2025).

RATIONALE FOR LISTING

Robinia pseudoacacia are a fast-growing tree, grows vegetatively into dense thickets, and have allelopathic properties, all of which allow it to push out desired vegetation (Bakewell-Stone, 2025; Benesperi *et al.*, 2012; Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017; Vítková *et al.*, 2020; Wolmarans, 2023). It is able to grow in a wide variety of habitats, especially disturbed and open areas, which has led to it being known as a pioneer species (Bakewell-Stone, 2025; Wolmarans, 2023; Kato-Noguchi & Kato, 2024; Sádlo *et al.*, 2017; Vítková *et al.*, 2020). Though it widespread in Washington (Burke Herbarium) and considered a nuisance plant in some locations, it is desired as a shade tree in other locations. A Class C listing would not require control at the state-level and could give individuals and organizations more ability to use herbicide or receive funding for removal of this acknowledged invasive tree.

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