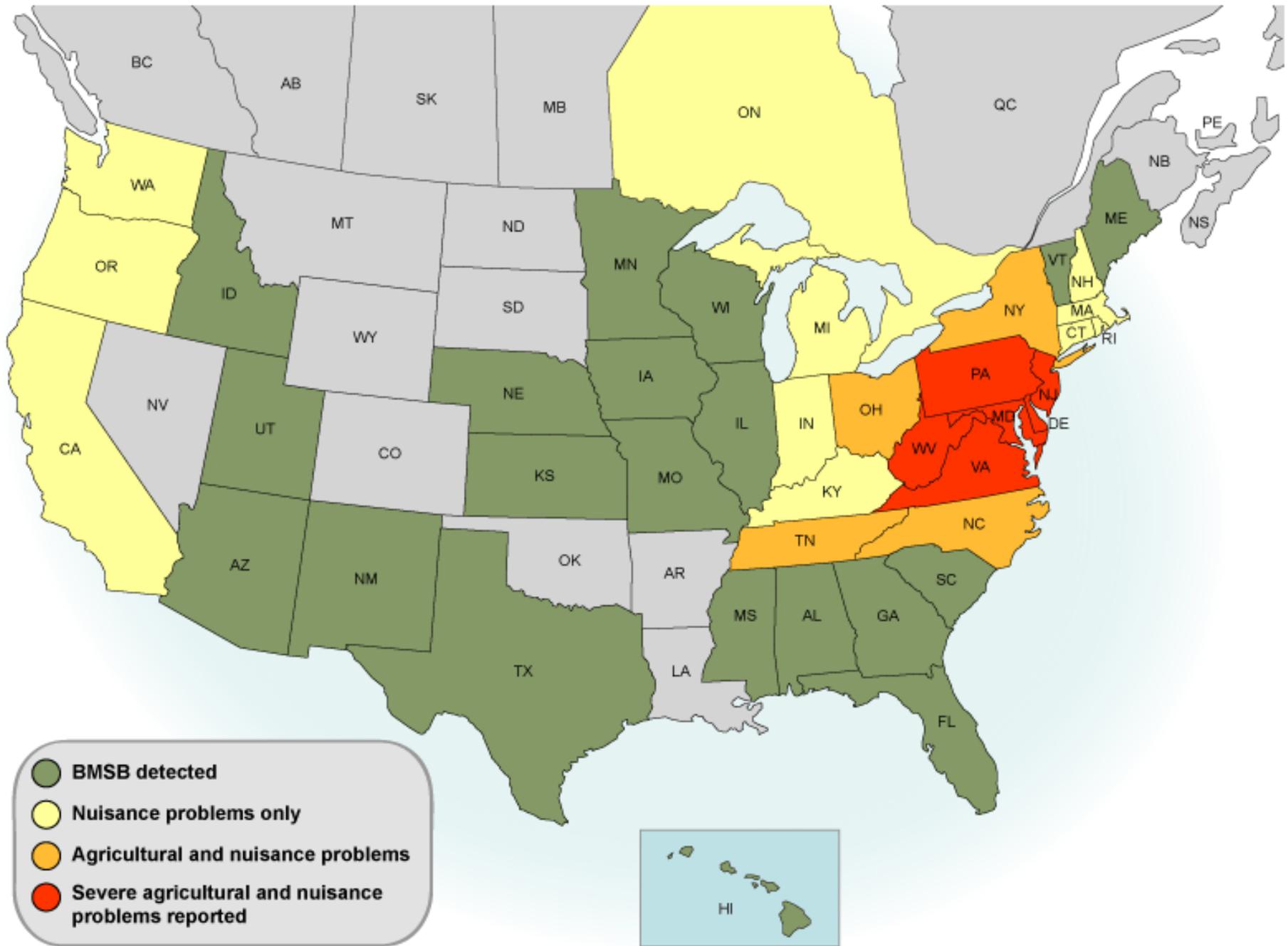


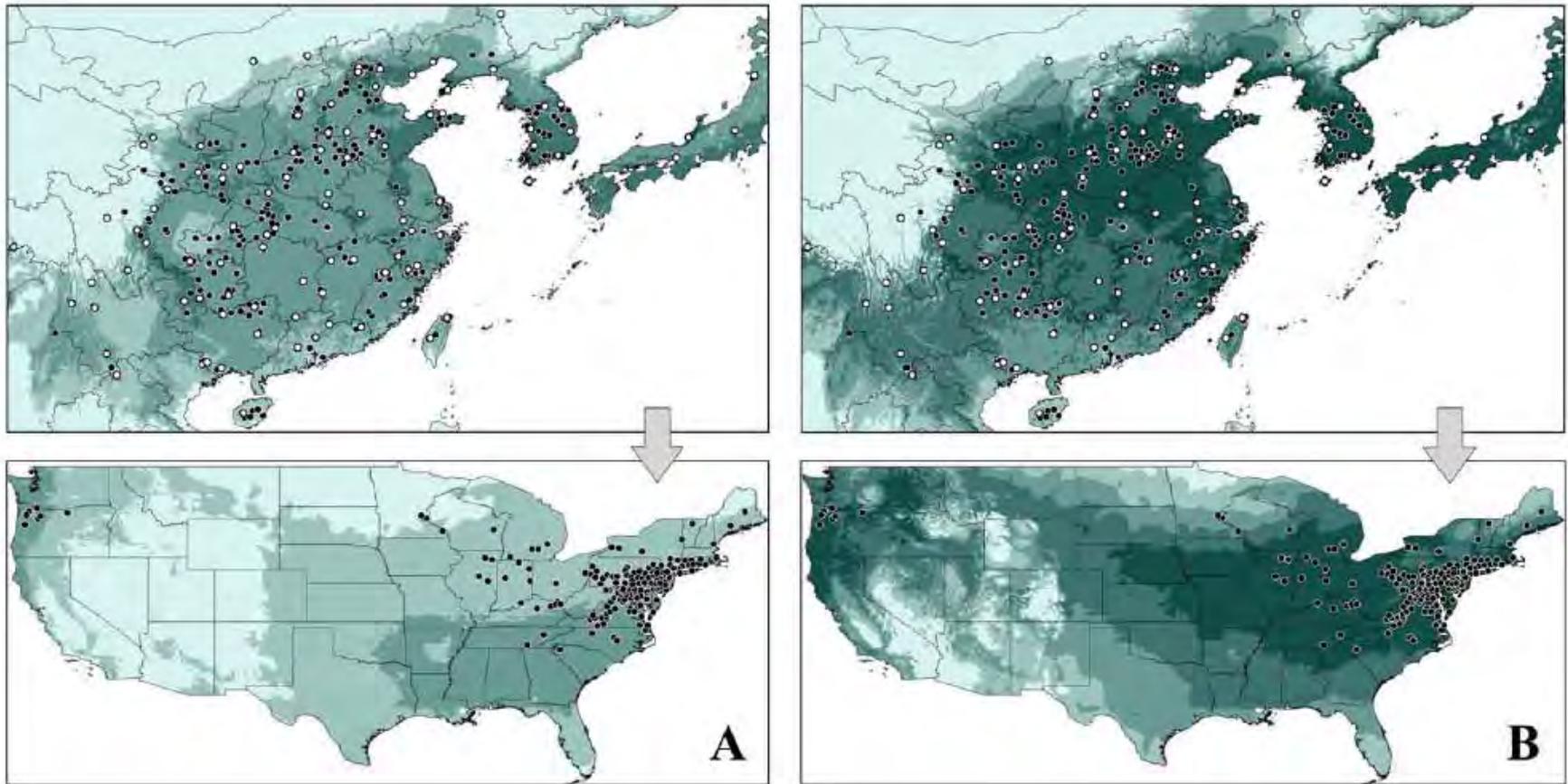
# Crops at Risk To BMSB Damage





# Niche Modeling

Zhu et al. 2012

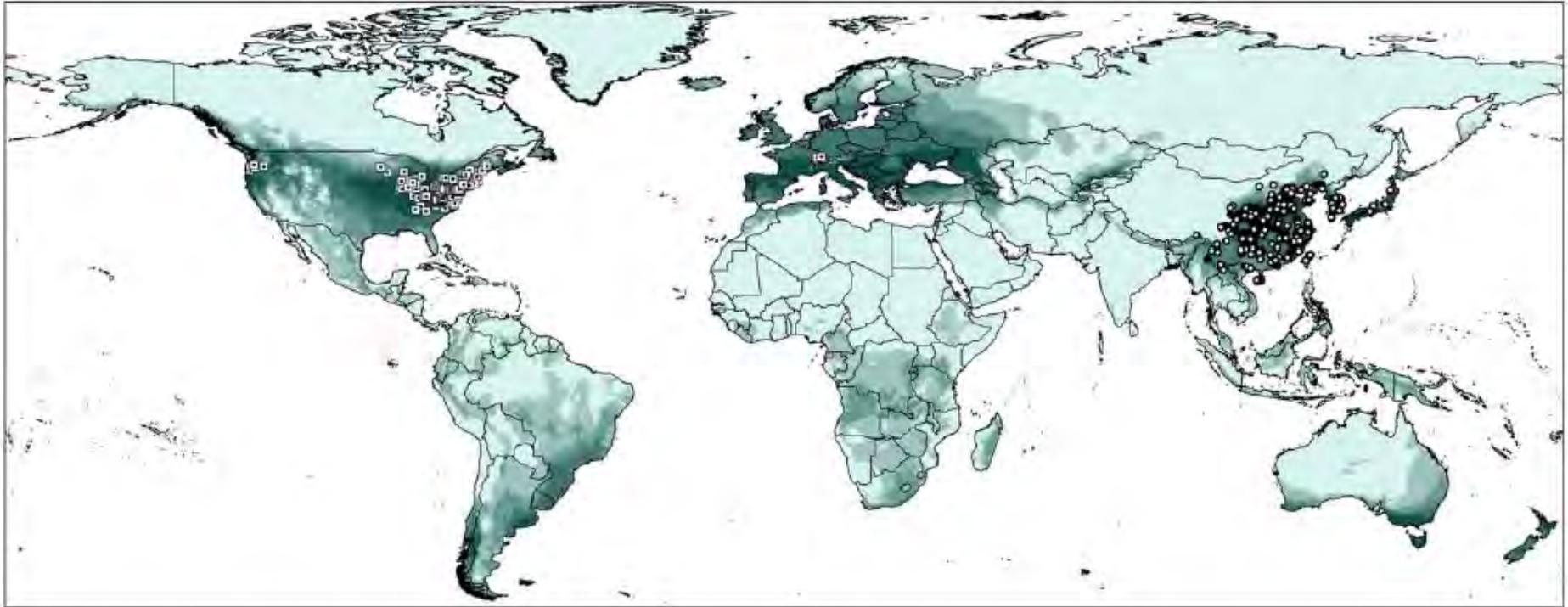


**Figure 3. Niche models based on reduced native records and projected onto the US using Maxent.** Dark green color represents high suitability, light green indicates low suitability. A: using 10 variables, B: using 6 variables, white and black dots represent the 95 occurrences for model calibration and the remaining for model evaluation.

doi:10.1371/journal.pone.0031246.g003

# Niche Modeling

Zhu et al. 2012



**Figure 6. Niche model based on reduced native records and transferred worldwide using Maxent.** Dark green color represents high suitability, light green indicates low suitability. White circles indicate the 95 occurrences used for model calibration, black dots and white squares represent the remaining native and invasive records used for model evaluation.

doi:10.1371/journal.pone.0031246.g006

# Known Food Crops That Serve as Hosts for BMSB in North America

- Okra
- Amaranth
- Garden Snapdragon
- Horseradish
- Cabbage/collards
- Cayenne Pepper
- Pecan
- Edible Fig
- Soybean
- Sunflower
- Common Hops
- Apple
- Filberts/hazelnuts
- Cucumber
- Summer squash
- Beans
- Apricot
- Peach
- Cherry
- European Pear
- Asian Pear
- Raspberry/Blackberry
- Wineberry
- Eggplant
- Tomato
- Highbush blueberry
- Wine grape
- Corn

# Known Ornamentals That Serve as Hosts for BMSB in North America

- Glossy Abelia
- Maple spp.
- Red horse-chestnut
- Ohio Buckeye
- Blue wild indigo
- Birch spp.
- Butterfly bush
- Siberian pea shrub
- European hornbeam
- Catalpa
- Oriental Bittersweet
- Cock's comb
- Korean hackberry
- Common button bush
- Katsura tree
- Eastern and Texas redbud
- Chinese fringeweed
- Kentucky yellowwood
- Dogwood spp.
- Chinese quince
- Firethorn
- Korean sun pear
- Oak spp.
- Rose spp.
- Hawthorn spp.
- Japanese persimmon
- Russian Olive
- Weeping forsythia
- Ginko
- Honeylocust
- Mountain silverbell
- Seven son flower
- Crimson eyed Rosemallow
- Rose of Sharon
- Eastern Red Cedar
- Goldenrain tree
- Crape myrtle
- Japanese larch
- Chinese privet
- Sweetgum
- Star Magnolia
- Crabapple sp.
- Dawn redwood
- Black gum (Tupelo)
- Moth orchid
- Cherry spp.
- Chinese elm
- Viburnum spp.

From "Host Plants of BMSB in the United States" at [stopbmsb.org](http://stopbmsb.org)

# Known Wild Plants That Serve as Hosts for BMSB in North America

- Maple spp.
- Tree of Heaven
- Lesser burdock
- Paw paw
- Common hackberry
- Pitseed Goosefoot
- Dogwood
- Hawthorn
- Green ash
- White ash
- Witch hazel spp.
- Crabapple
- Mimosa
- White mulberry
- Leafy wild parsley
- Chokeberry
- American pokeweed
- Cherry spp.
- American mountain ash
- Eastern hemlock
- Wild grape
- Honeysuckle spp.
- Tulip Tree

# Hosts Cited in the Asian Literature

Alder  
Apple  
Apricot  
Argyi wormwood  
Arrowroot  
Asparagus  
Azuki bean  
Beet  
Bell pepper  
Birch  
Black locust  
Black nightshade  
Burdock  
Bushkiller  
Cambridge cherry  
Camphortree  
Catalpa  
Cedar

Cedar  
Cherry  
Chestnut  
Chinese arborvitae  
Chinese chaste tree  
Chinese gooseberry  
Chinese haw  
Chinese hibiscus  
Chinese long bean  
Chinese milk vetch  
Chinese parasol tree  
Chinese tea  
Chinese white poplar  
Chinese wisteria  
Chocolate vine  
Citrus  
Clover  
Common mallow

Corn  
Cowpea  
Cucumber  
Eggplant  
Feather cockscomb  
Fig  
Grape

# Hosts Cited in the Asian Literature

Green plum  
Hairy vetch  
Harlequin glorybower  
Hinoki cypress  
Hollyhock  
Hops  
Japanese bird cherry  
Japanese cypress  
Japanese spindle  
Japanese weigela  
Japanese yew  
Japanese zelkova  
Jasmine tobacco  
Jujube  
Kidney bean  
Kudzu  
Lilac  
Lima bean  
Loquat  
Mandarin  
Maple  
Mulberry  
Mums  
Mustards  
Oil-seed camellia

Wild olive  
Orange  
Oriental arborvitae  
Empress tree  
Pea  
Peach  
Pear  
Persimmon  
Pine  
Plum  
Pomegranate  
Rape  
Raspberry

Red elderberry  
Rose balsam  
Siberian elm  
Small paper mulberry  
Soybean  
Staghorn sumac  
Strawberry  
String bean  
Sunflower  
Sweet corn  
T'ang ts'oi  
Tangerine  
Tapioca  
Tea tree  
Tomato  
Upland cotton  
Viburnum  
Wax myrtle  
Weeping scholar tree  
Wheat  
Wolfberry  
Yuzu

# Potential BMSB Hosts/Crops At Risk

- Northeast
- Southeast
- Midwest
- Mountain
- Southwest
- West Coast