

# Barberry

**David L. Long**

USDA-ARS, Cereal Disease Laboratory  
University of Minnesota, St. Paul, MN

[David.Long@ars.usda.gov](mailto:David.Long@ars.usda.gov)

[www.ars.usda.gov/mwa/cdl](http://www.ars.usda.gov/mwa/cdl)

**Ravages from wheat stem rust**  
**Lodged plants, shriveled to no grain**



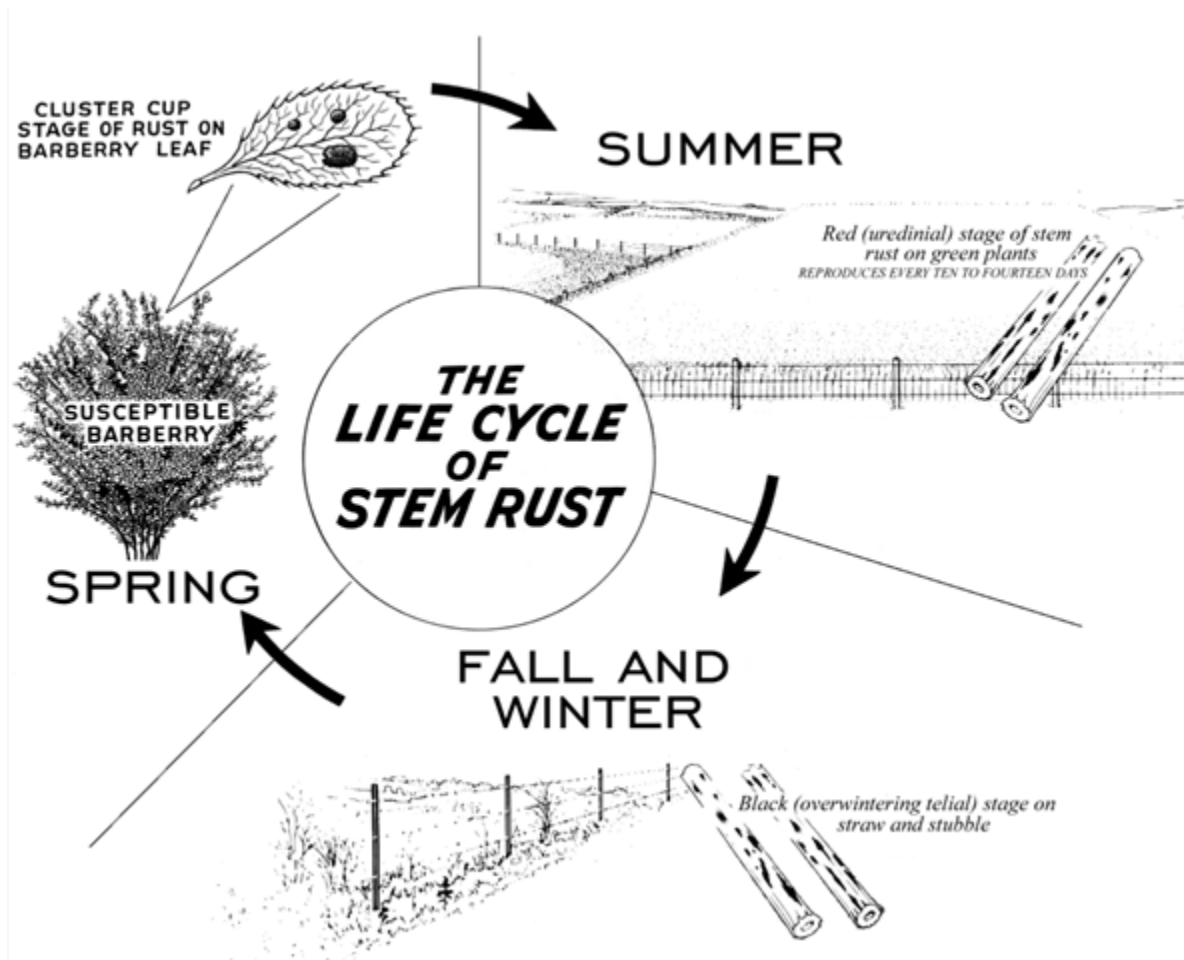








# *Puccinia graminis* lifecycle







# *Berberis vulgaris*



TWIG FROM A COMMON BARBERRY BUSH (Actual Size)

Learn to know the common barberry by observing closely (1) the clustered leaves, either green or purple, with saw-tooth edges, (2) the thorns, usually three in number, below the leaf clusters, (3) the bunches of bright red, oval berries, (4) the grey, outer bark, and the bright yellow, inner bark.

The common barberry is a tall, erect shrub, usually four to eight feet in height. Originally it was introduced for ornamental purposes, but rapidly became naturalized and spread as birds scattered the seeds. Look for common barberry bushes wherever any bushes grow.

Reprint from Illinois Agricultural Experiment Circular 308, furnished by the Conference for the Prevention of Grain Rust.



# LEARN TO KNOW *THE* RUST-SPREADING BARBERRY



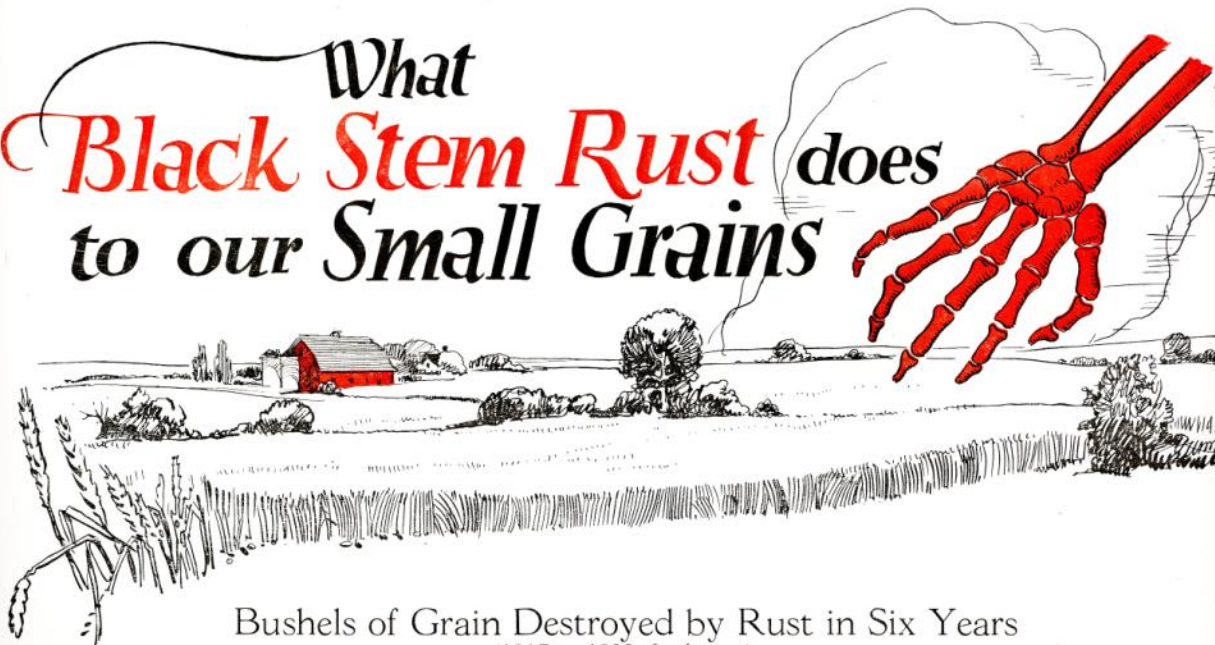
FIVE POINTS TO LEARN



COMMON BARBERRY MAY BE FOUND GROWING IN PASTURES AND WOODLANDS, OR AS PLANTED SHRUBBERY

TO REPORT BUSHES OR FOR INFORMATION WRITE TO  
PLANT PEST CONTROL DIVISION  
314 Old Federal Bldg., Columbus 15, Ohio

# What Black Stem Rust does to our Small Grains



Bushels of Grain Destroyed by Rust in Six Years  
(1917 to 1922, Inclusive)

	Wheat	Oats	Barley	Rye	Total	Annual Average All Grains
Colorado . . .	472,080		87,000	26,000	585,080	97,513
Illinois . . . . .	1,547,000	13,000,000	257,000	43,000	14,847,000	2,474,500
Indiana . . . . .	1,100,000				1,100,000	183,333
Iowa . . . . .	4,941,875	5,361,000	2,595,000		12,897,875	2,149,646
Michigan . . . . .	4,290,000	4,202,000	721,000	85,000	9,298,000	1,549,666
Minnesota . . . . .	28,161,250	17,464,000	4,592,000	515,000	50,732,250	8,455,375
Montana . . . . .	752,525	3,510,000	1,667,000		5,929,525	988,254
Nebraska . . . . .	16,557,000	2,849,000	289,000	18,000	19,713,000	3,285,500
North Dak. . . . .	58,204,000	24,153,000	10,361,000		92,718,000	15,453,000
Ohio . . . . .	3,506,000	616,000	9,000	35,000	4,166,000	694,333
South Dak. . . . .	19,299,760	16,147,000	2,699,000	882,000	39,027,760	6,504,626
Wisconsin . . . . .	4,722,950	5,001,000	2,875,000	411,000	13,009,950	2,168,325
Wyoming . . . . .		789,000		57,000	846,000	141,000
<b>TOTAL . . .</b>	<b>143,554,440</b>	<b>93,092,000</b>	<b>26,152,000</b>	<b>2,072,000</b>	<b>264,870,440</b>	<b>44,145,073</b>

These are official estimates of the Plant Disease Survey, Bureau of Plant Industry, U. S. Department of Agriculture. The money value of the grain destroyed was about \$45,000,000 annually, based on market prices of each crop December 1st of each year.



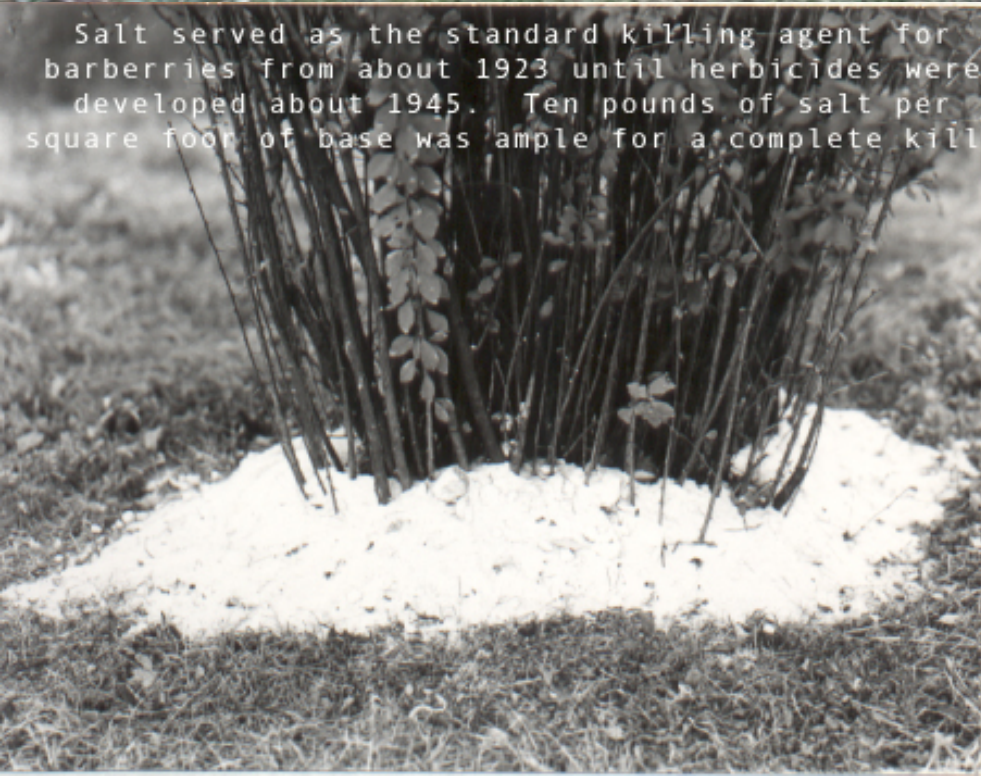
# One of many early educational materials





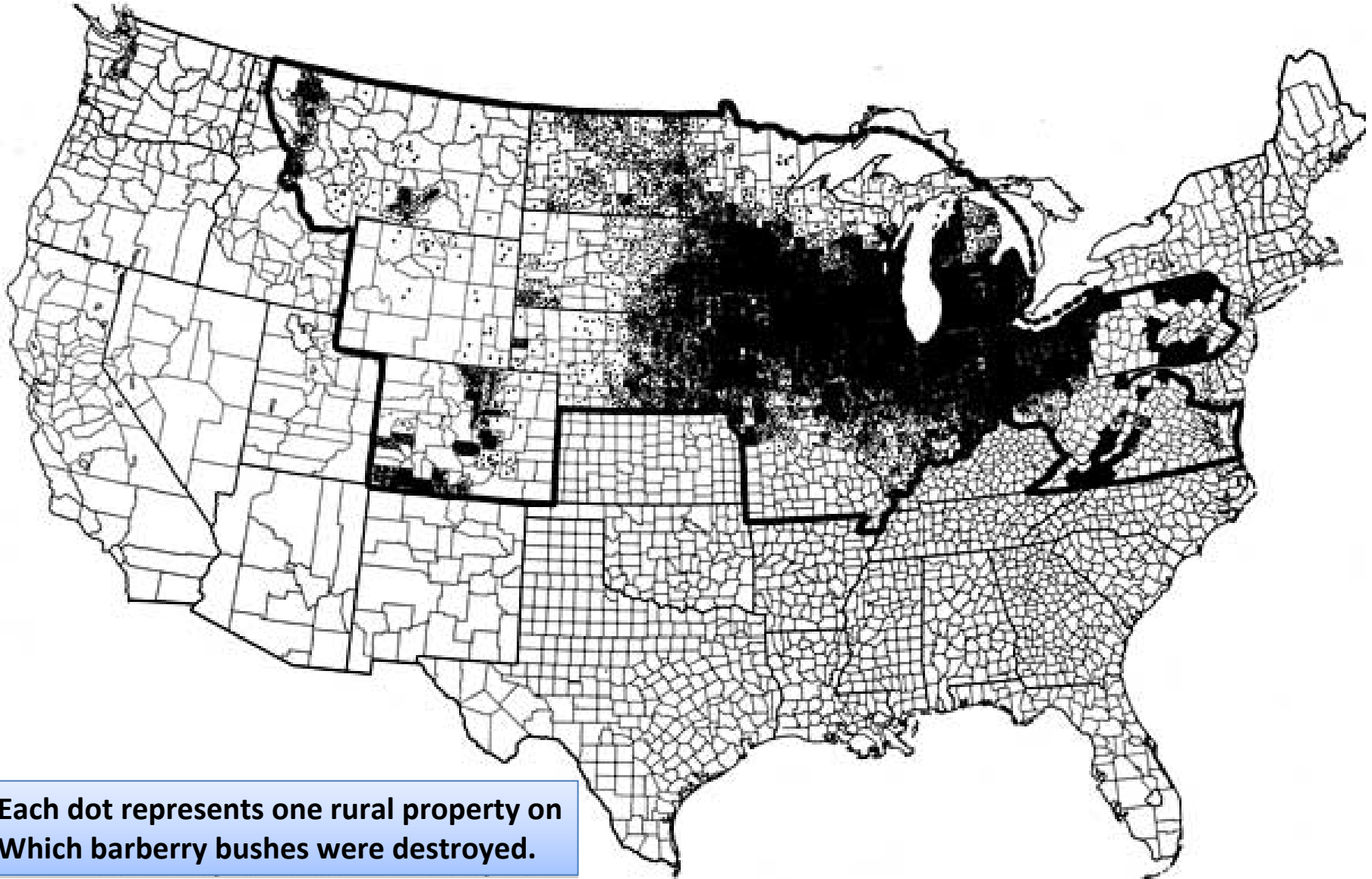
Cutting back and salting  
barberry prior to the  
use of herbicides

Salt served as the standard killing agent for  
barberries from about 1923 until herbicides were  
developed about 1945. Ten pounds of salt per  
square foot of base was ample for a complete kill





## States Cooperating in the Barberry Eradication Program



Each dot represents one rural property on which barberry bushes were destroyed.

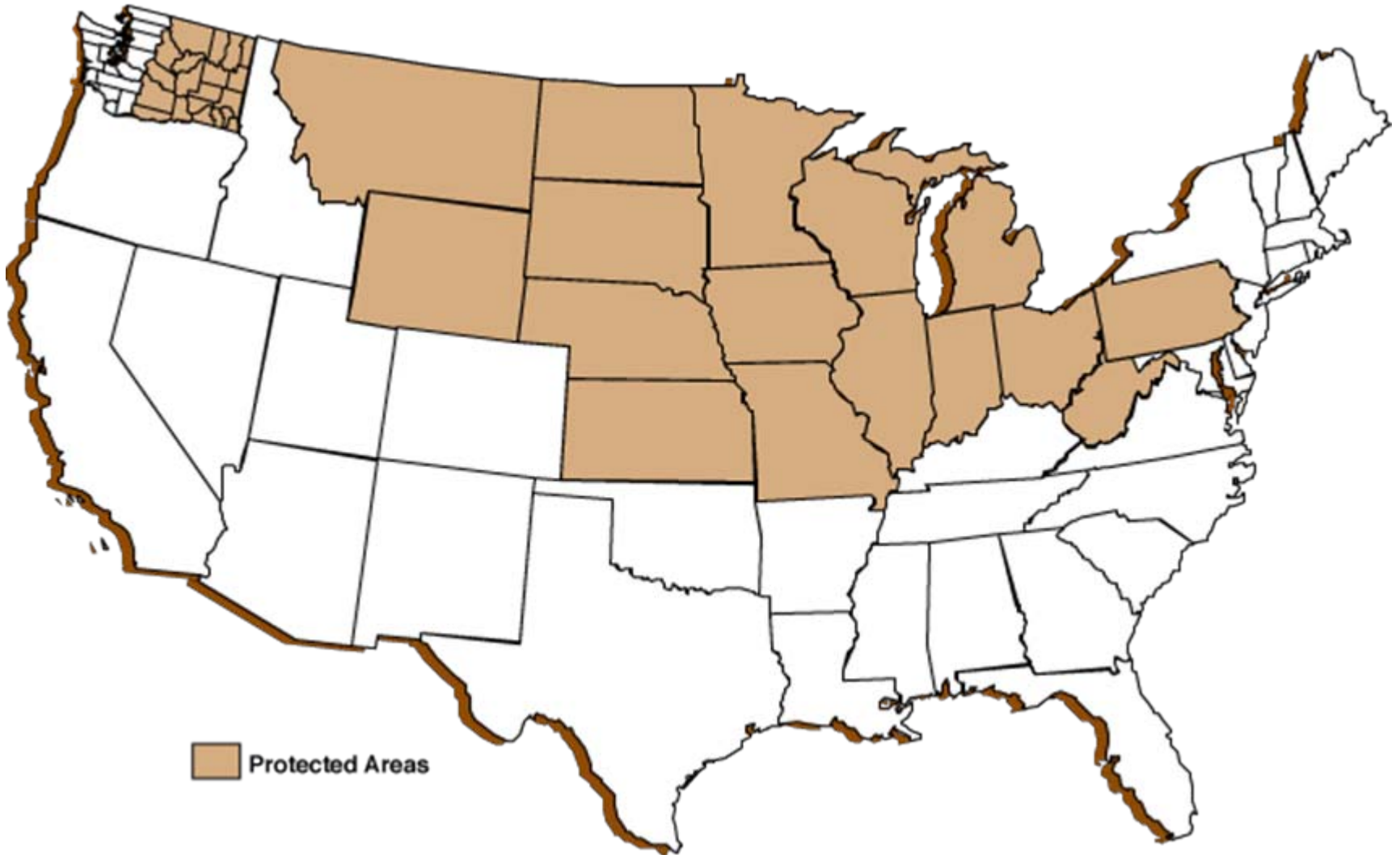
# Cumulative number of barberry bushes destroyed in 13 original eradication states

Year	Barberry bushes destroyed (cumulative number)
1918	1,692,971
1922	5,411,935
1927	16,066,444
1932	18 665,403
1937	25,713,333
1942	36,995,627
1947	41,042,511
1952	74,691,695
1957	96,180,475
1962	98,690,462
1967	99,445,774



# Protected areas

Susceptible *Berberis*, *Mahonia* and *Mahoberberis* may not be shipped to these areas







VOLUME 4  
SEEDLINE  
KERMANTACEAE

Spring Meadow







































