LANDSCAPE ECOLOGY "Noxious Weeds Invasion Analysis"

PREPARED BY:

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INTERIOR COLUMBIA BASIN
ECOSYSTEM MANAGEMENT PROJECT

Preface

The following report was prepared by University scientists through cooperative agreement, project science staff, or contractors as part of the ongoing efforts of the Interior Columbia Basin Ecosystem Management Project, co-managed by the U.S. Forest Service and the Bureau of Land Management. It was prepared for the express purpose of compiling information, reviewing available literature, researching topics related to ecosystems within the Interior Columbia Basin, or exploring relationships among biophysical and economic/social resources.

This report has been reviewed by agency scientists as part of the ongoing ecosystem project. The report may be cited within the primary products produced by the project or it may have served its purposes by furthering our understanding of complex resource issues within the Basin. This report may become the basis for scientific journal articles or technical reports by the USDA Forest Service or USDI Bureau of Land Management. The attached report has not been through all the steps appropriate to final publishing as either a scientific journal article or a technical report.

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I. EXECUTIVE SUMMARY

INVADERS Database Release 6.2, supplemented by literature sources, was used to determine susceptibility of cover types to invasion by noxious weeds; and to generate regional scale distribution maps and graphs of historic spread rates to the county scale of resolution over the last 120 years (1875-1994). Polynomial equations modeling the spread rate and temporal pattern were developed for each noxious weed.

We now have in excess of 90% of the potentially available distribution data for the 206 taxa on the Federal, WA, OR, ID, MT, and WY noxious weed lists.

A data matrix describing the susceptibility of cover types to noxious weed invasion was prepared. The cells of the matrix were coded for susceptibility to invasion based on **D**isturbance required, **I**nvasion successful without disturbance, cover type **C**losed to that weed, or **U**nknown combination of weed or cover type.

The matrix has 206 records for noxious weed taxa and a total of 84 cover type **f**ields (79 cover types, 5 repeated twice). The cover types reflect the most current listing (Menakis 5/10/95 & Karl 5/25/95). The cover types include 43 current cover types based on CRB specific, CRBS specific, Society Range Management (1994), Society of American Foresters (1980) definitions. Agricultural land use (CRBS12) is split into irrigated & non-irrigated categories. SAF213 "Grand fir" was added for exotics associated with interior Grand fir. The data matrix file also contains 36 additional SRM (1994) cover type fields that are subsets of potential vegetation types. These 36 SRM cover type subsets of potential veg cover types were coded for susceptibility to invasion by each of the 27 taxa on the priority noxious weed list developed for the CRB project. Five SRM cover types are use for both current veg (SRM###C) analyses and potential vegetation type (SRM###P) analyses.

If the CRB GIS layer linking latlong to current veg cover type becomes available we should consider the sequence: use the INVADERS distribution record field for "locale" to go to the USGS Geographic Names Database (GNIS) to obtain latlong, then to CRB GIS for current veg cover type. This could increase the number of useful INVADERS Database distribution records several fold. It could also provide adequate data for an environmental & physical factors (elevation, precipitation rates, min & max temp, etc.) analysis of susceptible habitats.

II. LEGAL STATUS OF NOXIOUS WEEDS

"Noxious" is a legal classification, not an ecological term. Plants that can have significant environmental or economic impact can be designated as noxious by various government agencies. Federal and state laws require certain actions directed at the management of noxious weeds.

The Federal Government and the five principal states in the study area (Idaho, Montana, Oregon, Washington, and Wyoming) have separate noxious weed lists. A total of 206 taxa have been designated as noxious by at least one of these six governmental entities. Downy brome or cheatgrass (Bromus tectorum) is the only weed species included in this report that is not designated a noxious weed.

The noxious lists for Montana, Washington and Oregon have multiple categories. The MT, OR, & WA category codes are included in the listing for each noxious weed. The Idaho, Wyoming, and the Federal noxious weed lists do not have multiple categories. The weed is simply classified as noxious and indicate by "Y" in the following table.

In Montana: Category 1 is for weeds that are well established and generally widespread. The management strategies are directed at containment and suppression. Category 2 species are weeds that have been recently introduced to Montana or are rapidly spreading. Management efforts are directed at monitoring, containment, and eradication when possible. Category 3 species are weeds that have had significant impact in adjoining states and are believed to be adapted to Montana climate. The Category 3 weeds have not yet been detected in Montana or are found only in localized, small, scattered infestations. Early detection and immediate action to eradicate are the management goals. The designations are made by the State Department of Agriculture.

In Oregon: Category A species are weeds of known economic importance that are still limited to small enough infestations to allow possible eradication/containment. Category A also includes weeds that are not known to occur in Oregon but exist in neighboring states and invasion of Oregon seems imminent. Category B species are weeds of economic importance that are abundant in some regions of Oregon but are of limited distribution in other Oregon counties. Where implementation of a fully-integrated statewide management plan is not feasible, biological control is the main strategy. Category T species are the noxious weeds that require implementation of an integrated statewide management plan. These designations are made by the Oregon State Weed Board.

In Washington: Category A species are noxious weeds not native to the state but are of limited distribution or have not been found in a region of Washington where they would pose a serious threat. Category B species are noxious weeds whose populations in a region are such that all seed production could be prevented within a calendar year. Category C species are any other noxious weeds.

Genus	Species	common_name	MT_cat	ID_cat	OR_cat	WA_cat	WY_cat	Fed_cat
Abutilon	theophrasti	velvetleaf			B	A		
Aegilops	cylindrica	jointed goatgrass		Y	B	C		
Aeginetia	spp.							Y
Ageratina	adenophora	gland-bearing thoroughwort						Y
Agropyron	repens	quackgrass			B		Y	
Alectra	spp.							Y
Alhagi	pseudalhagi	camelthorn			A	B		
Alopecurus	myosuroides	black twitch				B		
Alternanthera	sessilis	dwarf copperleaf						Y
Ambrosia	tomentosa	skeletonleaf bursage		Y			Y	
Anchusa	officinalis	common bugloss				B		
Anthriscus	sylvestris	cow parsely				C		
Arctium	minus	common burdock					Y	
Artemisia	absinthium	absinth wormwood				C		
Avena	sterilis	animated oat						Y
Azolla	pinnata	feathered waterfern						Y
Borreria	alata	winged borreria						Y
Bromus	tectorum	downy brome	-	-	-	-	-	-
Bryonia	alba	white bryony				B		
Cardaria	draba	hoary cress	1	Y		C		
Cardaria	pubescens	hairy whitetop				C	Y	
Carduus	acanthoides	plumeless thistle				B	Y	
Carduus	nutans	musk thistle		Y	B	B	Y	
Carduus	pycnocephalus	Italian thistle			B	A		
Carduus	tenuiflorus	distaff thistle			B	A		
Carthamus	baeticus				A			
Carthamus	lanatus	distaff thistle			A			
Carthamus	leucocaulos	white-stemmed thistle			A			
Carthamus	oxycantha	sharp eyed thistle						Y
Cenchrus	longispinus	longspine sandbur				B		
Centaurea	calcitrapa	purple starthistle			A	A		
Centaurea	diffusa	diffuse knapweed	1	Y	B	B	Y	
Centaurea	iberica	Iberian starthistle			A			
Centaurea	juncea	knapweed				B		
Centaurea	juncea x nigra	knapweed				B		
Centaurea	macrocephala	bighead knapweed				A		
Centaurea	maculosa	spotted knapweed	1	Y	B	B	Y	
Centaurea	nigra	black knapweed				B		
Centaurea	nigrescens	knapweed				A		
Centaurea	pratensis	meadow knapweed		Y	B			
Centaurea	repens	Russian knapweed	1	Y	B	B	Y	
Centaurea	solstitialis	yellow starthistle	3	Y	B	B		
Centaurea	virgata	squarrose knapweed			A			
Chaenorrhinum	minus	dwarf snapdragon				C		
Chondrilla	juncea	rush skeletonweed	3	Y	B	B		
Chrysanthemum	leucanthemum	oxeye daisy					Y	
Chrysopogon	aciculatus	small needled goldbeard						Y
Cirsium	arvense	Canada thistle	1	Y	B	C	Y	
Cirsium	vulgare	bull thistle			B	C		
Commelina	benghalensis	spiderwort						Y
Conium	maculatum	poison hemlock		Y	B	C		
Convolvulus	arvensis	field bindweed	1	Y	B	C	Y	
Crupina	vulgaris	common crupina	3	Y	A	A		Y
Cuscuta	approximata	clustered dodder				C		
Cuscuta	spp. (except for *)	dodder			B			
Cynoglossum	officinale	houndstongue				C	Y	
Cyperus	esculentus	yellow nutsedge			B	B		
Cytisus	monspessulanus	French broom			B			
Cytisus	scoparius	Scotch broom		Y	B	B		

Genus	Species	common_name	MT_cat	ID_cat	OR_cat	WA_cat	WY_cat	Fed_cat
Daucus	carota	wild carrot				C		
Digitaria	abyssinica	bottomless crabgrass						Y
Digitaria	scalarum	ladder crabgrass						Y
Digitaria	velutina	velvety crabgrass						Y
Drymaria	arenarioides	sandy drymaria						Y
Echium	vulgare	blueweed				B		
Egeria	densa	Brazillian elodea				B		
Eichhornia	azurea	peacock hyacinth						Y
Emex	australis	southern dock						Y
Emex	spinosa	spined dock						Y
Equisetum	arvense	field horsetail			B			
Equisetum	telmateia	giant horsetail			B			
Eruca	sativa	garden rocket				C		
Eupatorium	adenophorum	gland-bearing thoroughwort						Y
Euphorbia	dentata	toothed spurge		Y				
Euphorbia	esula	leafy spurge	1	Y	B	B	Y	
Euphorbia	prunifolia	plum-leafed spurge						Y
Galega	officinalis	goat's rue						Y
Gypsophila	paniculata	babysbreath				C		
Halogeton	glomeratus	halogeton			B			
Helianthus	ciliaris	Texas blueweed				A		
Hemizonia	pungens	spikeweed			B	C		
Heracleum	mantegazzianum	giant hogweed				A		Y
Hibiscus	trionum	Venice mallow				A		
Hieracium	aurantiacum	orange hawkweed		Y		B		
Hieracium	pilosella	mouse ear hawkweed				A		
Hieracium	pratense	yellow hawkweed		Y		B		
Hydrilla	verticulata	whorled-leaved hydrilla			A			Y
Hygrophila	polysperma	many-seeded hydrilla						Y
Hyoscyamus	niger	black henbane		Y		C		
Hypericum	perforatum	common St. Johns wort	1		B	C		
Hypochaeris	radicata	spotted cats ear				B		
Imperata	brasiliensis	Brazillian imperata						Y
Imperata	cylindrica	cylindrical imperata						Y
Ipomoea	aquatica	water spinach						Y
Ipomoea	triloba	three-lobed morning glory						Y
Isatis	tinctoria	dyer's woad	2	Y	B	A	Y	
Ischaemum	rugosum	wrinkle duck beak						Y
Kochia	scoparia	kochia			B	C		
Lagarosiphon	major	larger lagarosiphon						Y
Lamium	hybridum	dead-nettle				B		
Lepidium	latifolium	perennial pepperweed		Y	B	B		
Leptochloa	chinensis	red sprangle top						Y
Lepyrodiclis	holosteoides					B		
Limnophila	sessiliflora	sedentary limnophila						Y
Linaria	dalmatica	dalmatian toadflax	1	Y	B	B	Y	
Linaria	vulgaris	yellow toadflax		Y	B	C	Y	
Lychnis	alba	white campion				C		
Lycium	ferocissimum	ferocious boxthorn						Y
Lysimachia	vulgaris	garden loosestrife				B		
Lythrum	salicaria	purple loosestrife	2	Y	B	B		
Lythrum	virgatum	wandlike loosestrife				B		
Matricaria	maritima	false chamomile				C		
Melastoma	malabathricum	Indian rhododendron						Y
Mikania	cordata	heart-leaved mikania						Y
Mikania	micrantha	small-leaved mikania						Y
Milium	vernale	spring millet grass		Y				
Mimosa	invisa	two-thrush mimosa						Y
Mimosa	pigra	slow mimosa						Y

Genus	Species	common_name	MT_cat	ID_cat	OR_cat	WA_cat	WY_cat	Fed_cat
Mirabilis	nyctaginea	wild four o'clock				A		
Monochoria	hastata	sliverleaf monochoria						Y
Monochoria	vaginalis	sheathed pickerel-weed						Y
Myriophyllum	brasiliense	parrotfeather				B		
Myriophyllum	spicatum	Eurasian watermilfoil			B	B		
Nardus	stricta	moor matgrass		Y	A			
Nassella	trichotoma	cut hair nassella						Y
Onopordum	acanthium	Scotch thistle		Y	B	B	Y	
Opuntia	aurantiaca	tiger pear						Y
Orobanche	spp. (except for *)	broomrape						Y
Oryza	longistaminata	long-stamened rice						Y
Oryza	punctata	punctured rice						Y
Oryza	rufipogon	red-bearded rice						Y
Ottelia	alismoides							Y
Panicum	miliaceum	wild proso millet			B			
Paspalum	scrobiculatum	kodo millet						Y
Peganum	harmala	African rue			A	A		
Pennisetum	clandestinum	kikuyu grass						Y
Pennisetum	macrourum							Y
Pennisetum	pedicellatum							Y
Picris	hieracoides	bitterweed				B		
Polygonum	cuspidatum	Japanese knotweed			B			
Potentilla	recta	sulfur cinquefoil	1			C		
Proboscidea	louisianica	devil's claw				A		
Prosopis	alapataco	alpataco						Y
Prosopis	argentina	Argentine prosopis						Y
Prosopis	articulata	jointed prosopis						Y
Prosopis	burkartii							Y
Prosopis	caldenia	calden						Y
Prosopis	calingastana	cusqui						Y
Prosopis	campestris	field prosopis						Y
Prosopis	castellanosii							Y
Prosopis	denudans	algarrobo patagonica						Y
Prosopis	elata	lofty prosopis						Y
Prosopis	farcta	stuffed prosopis						Y
Prosopis	ferox	fierce prosopis						Y
Prosopis	fiebrigii							Y
Prosopis	hassleri	algarrobo						Y
Prosopis	humilis	low prosopis						Y
Prosopis	kuntzei	itin						Y
Prosopis	pallida	cloaked prosopis						Y
Prosopis	palmeri	palm leaved prosopis						Y
Prosopis	reptans	creeping prosopis						Y
Prosopis	rojasiana							Y
Prosopis	ruizlealii							Y
Prosopis	ruscifolia	broom leaved prosopis						Y
Prosopis	sericantha	silken prosopis						Y
Prosopis	strombulifera	spreading prosopis						Y
Prosopis	torquata	tintitaco						Y
Rorippa	austriaca	Austrian fieldcress				B		
Rorippa	sylvestris	yellow fieldcress			A			
Rottboellia	cochinchinensis	Kelly grass						Y
Rottboellia	exaltata	itch grass						Y
Rubus	fruticosus	bramble						Y
Rubus	moluccanus	robust blackberry						Y
Sagittaria	sagittifolia	arrowhead						Y
Salsola	vermiculata	tumbleweed						Y
Salvia	aethiopis	Mediterranean sage			B			
Salvinia	auriculata	auricled floating fern						Y

Genus	Species	common_name	MT_cat	ID_cat	OR_cat	WA_cat	WY_cat	Fed_cat
Salvinia	biloba	two-lobed floating fern						Y
Salvinia	herzogii							Y
Salvinia	molesta	disturbed floating fern						Y
Secale	cereale	cultivated rye				C		
Senecio	jacobaea	tansy ragwort		Y	B	B		
Setaria	pallide-fusca	kavatta grass						Y
Silybum	marianum	blessed milkthistle			B	A		
Solanum	dulcamara	bittersweet nightshade				C		
Solanum	elaeagnifolium	silverleaf nightshade		Y	A	A		
Solanum	rostratum	buffalobur		Y	B	A		
Solanum	torvum	turkeyberry						Y
Sonchus	arvensis	perennial sowthistle		Y		B	Y	
Sorghum	halepense	Johnsongrass		Y	B	A		
Sparganium	erectum	erect bur-reed						Y
Spartina	alterniflora	smooth cord grass			A	B		
Spartina	anglica	cordgrass				B		
Sphaerophysa	salsula	Swainsonpea			B	B		
Stratiotes	aloides	water soldier						Y
Striga	spp.							Y
Taeniatherum	caput-medusae	medusahead			B			
Tanacetum	vulgare	common tansy				C		
Torilis	arvensis	field hedge-parsley				B		
Tribulus	terrestris	puncturevine			B	C		
Tridax	procumbens							Y
Ulex	europaeus	gorse			B	B		
Urochloa	panicoides							Y
Verbascum	thapsus	common mullein				C		
Xanthium	spinosum	spiny cocklebur			B	C		
Zygophyllum	fabago	Syrian beancaper		Y		A		

- Bromus tectorum (downy brome) is not legally declared a noxious weed

*** EXCEPTIONS (NOT NOXIOUS)**

Cuscuta

C. americana
C. applanata
C. approximata
C. attenuata
C. boldinghii
C. brachycalyx
C. californica
C. campestris
C. cassytoides
C. ceanothi
C. cephalanthi
C. compacta
C. coryli
C. cuspidata
C. decipiens
C. dentatasquamata
C. denticulata
C. epilinum
C. epithymum
C. erosa
C. europaea
C. exaltata
C. fasciculata
C. glabrior
C. globulosa
C. glomerata
C. gronovii
C. harperi
C. howelliana
C. indecora
C. jepsonii
C. leptantha
C. mitriformis
C. nevadensis
C. obtusiflora
C. occidentalis
C. odontolepis
C. pentagona
C. planiflora
C. plattensis
C. polygonorum
C. rostrata
C. runyonii
C. salina
C. sandwichiana
C. squamata
C. suaveolens
C. suksdorfii
C. tuberculata
C. umbellata
C. umbrosa
C. vetchii
C. warneri

Orobanche

O. bulbosa
O. californica
O. cooperi
O. corymbosa
O. dugesii
O. fasciculata
O. ludoviciana
O. multicaulis
O. parishii
O. pinorum
O. uniflora
O. valida
O. vallicola

III. NOXIOUS WEED DISTRIBUTION MAPS & HISTORIC SPREAD GRAPHS

INVADERS Database Release 6.2 contains 64,217 plant species distribution records for WA, OR, ID, MT, and WY. These records include 51,587 exotics, of which 14,438 records are for noxious weeds. These data were obtained from 29 sources. Major data sources in INVADERS Release 6.2 include 5 of the 6 largest regional herbaria, state department of agriculture and APHIS/CAPS surveys, USFS Region 1 ECODATA, Region 6 Ecology Plots, and a CRB Assessment Team survey conducted by Dr. Mike "Sherm" Karl. Additional minor data sources include various publications, private collections, and partial data sets from Rocky Mountain Herbarium (UW-Laramie) and smaller regional herbaria. We believe that release 6.2 contains most (estimate 90% plus) of the available distribution records for the noxious weed species.

MAPS:

To produce a map for a species the INVADERS software asked for the distribution records from all data sources in Release 6.2. The maps show specific counties where at least one distribution record exists. In the five state region (WA,OR,ID,MT,WY) there are 199 counties. The time span of the search is listed in the label above the map. Maps could be generated for restricted, sequential, or cumulative time spans. For the purposes of this report the search was executed for the entire time span of the database, 1875-1994.

The INVADERS database will show definitive presence of a species, not proof of its absence. The absence of data for a species within a county does not guarantee the absence of the species from the county. It could mean that data collection so far has not found any records for that species. The more data sources that we collect data from, the better the chance are that a blank county means no presence of the species.

GRAPHS & PREDICTIVE EQUATIONS:

The graphic plots show the cumulative number of counties with herbarium or extension service records for the species in a given year. Only the herbarium records, extension service records, and several minor sources were searched to create these graphic plots. Data from state agriculture department surveys and federal agency data is focused on well known or widespread weeds and creates a sudden positive slope bias in the curves. However the data from state weed identification labs provides new county records in a manner similar to that of herbarium data.

The primary data sources for the graphs in this report were:

Oregon State University (Corvallis) Herbarium
Washington State University (Pullman) Herbarium
University of Idaho (Moscow) Herbarium

University of Montana (Missoula) Herbarium
Montana State University (Bozeman) Herbarium
Frank Forcella 1980 Regional Herbaria Study
WA,OR,ID,MT Extension Service 1991-1994
Richard Old WA,OR,ID,MT Extension Service Data (<1991)

There were 10 minor sources of records for the graphs. They include various literature sources, partial data sets from other herbaria, and personal collections.

The selected data are plotted as * and these actual data points connected by simple linear interpolation. The first and last year of record is printed on the graph.

Least-square approximations were used to derive polynomial equations to the third degree with the dependent variable (y) being the number of counties where the presence of the exotic had been documented by a herbarium specimen or Extension Service record. The first year of record for each county is the independent variable. The Chi Squared method of error measurement was then used to determine which model curve provided the best fit to the herbarium and extension data. For data sets of 6 or more herbarium/extension service records the resulting smoothed curve is plotted as a fine dotted line to show the model pattern of range expansion.

The best fit polynomial is given at the upper left side of the graph. The equation can be used to find the number of counties infected by the exotic plant for a given year.

One can recognize at least five time-dependent patterns of weed spread. Different spread curves suggest different ecological process and regional scale management strategies for a species.

1. Linear series (1st degree polynomial or higher order with very small exponents) are usually old weeds that have already filled up most of the region.

2. Root-function series are weeds that have reached their maximum range but are of limited distribution (2nd degree polynomial with negative exponent).

3. Logistic series (s-curve or 3rd degree polynomial) had a slow start, a rapid middle expansion phase, and now their rate of spread is leveling off. The middle expansion phase is often is the result of a change in land use or agronomic practices, or an acclimation of the invader to its new environment.

4. Positive exponential curves (2nd degree with positive exponent; more than 25 counties already occupied) are rapidly expanding weeds.

5. Early exponential curves (2nd degree with positive exponent; less than 25 counties already occupied) suggest weeds that have a potential similar to spotted knapweed or leafy spurge but are still in an early phase of expansion. The early exponentials include the new weeds which will be the spotted knapweeds of the next 20 years.

EXAMPLE CALCULATIONS USING PREDICTIVE EQUATIONS:

y is the number of counties infected at a given year.
x is the year for which a prediction is desired subtracted by the year that the first record was reported.

Following are two examples that show how the equation works to describe the past and predict the future spread:

1. You want to predict the minimum number of counties that might be colonized in the year 2000 by the recent invader orange hawkweed (Hieracium aurantiacum).

The best fitting equation was exponential (second degree polynomial:

$$y=1.226073-0.081472*x^1+0.005489*x^2$$

The first orange hawkweed was reported in 1927

We want to predict minimum number of counties expected to be infected at the year 2000. Our assumption is that the future spread rate will match the current expansion rate.

First we calculate x:
x = year in question - year of first record.
x = 2000 - 1927 = 73

Second we use 73 for x in the equation:
y = 1.226-(0.0815*73)+(0.00549*(73)^2)
y = 1.23-5.95+29.26
y = 24.5
or 25 counties

This means that by the year 2000, the least square approximation predicts that Hieracium aurantiacum will be found in a minimum of 25 counties. The prediction is based on the current spread rate. It can be seen that the modeled line for orange hawkweed has good agreement with the historic data.

2. You want to know how widespread downy brome or cheatgrass (Bromus tectorum) was in 1918.

The best fitting equation was a third degree polynomial with small exponents, approaching a linear fit over the century of records:

$$y = 1.378952 + 0.345991*x^1 + 0.024026*x^2 - 0.000184*x^3$$

The first record is found in the year 1898

We want to find the number of counties infected in 1918.

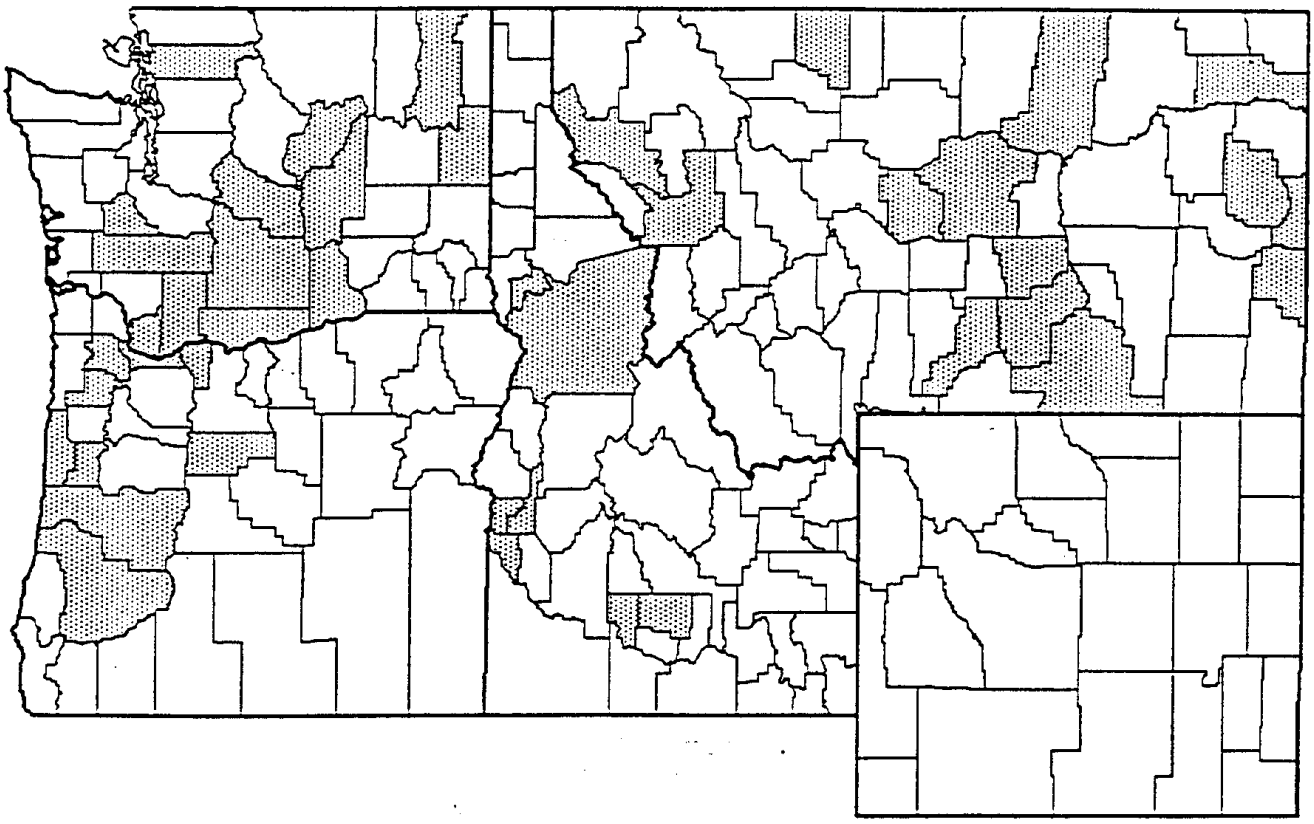
First we calculate x:
x = year in question - year of first record.
x = 1918 - 1898 = 20

Second we use 20 for x in the equation:
y = 1.379 + 0.346*20 + 0.0240*(20)^2 - 0.000184*20^3
y = 1.38 + 6.92 + 9.60 - 1.47
y = 16.4
or 16 counties

This means that at the year 1918, the least square approximation suggests that downy brome would have be found in at least 16 counties. This approximation is very close to the actual data that we have.

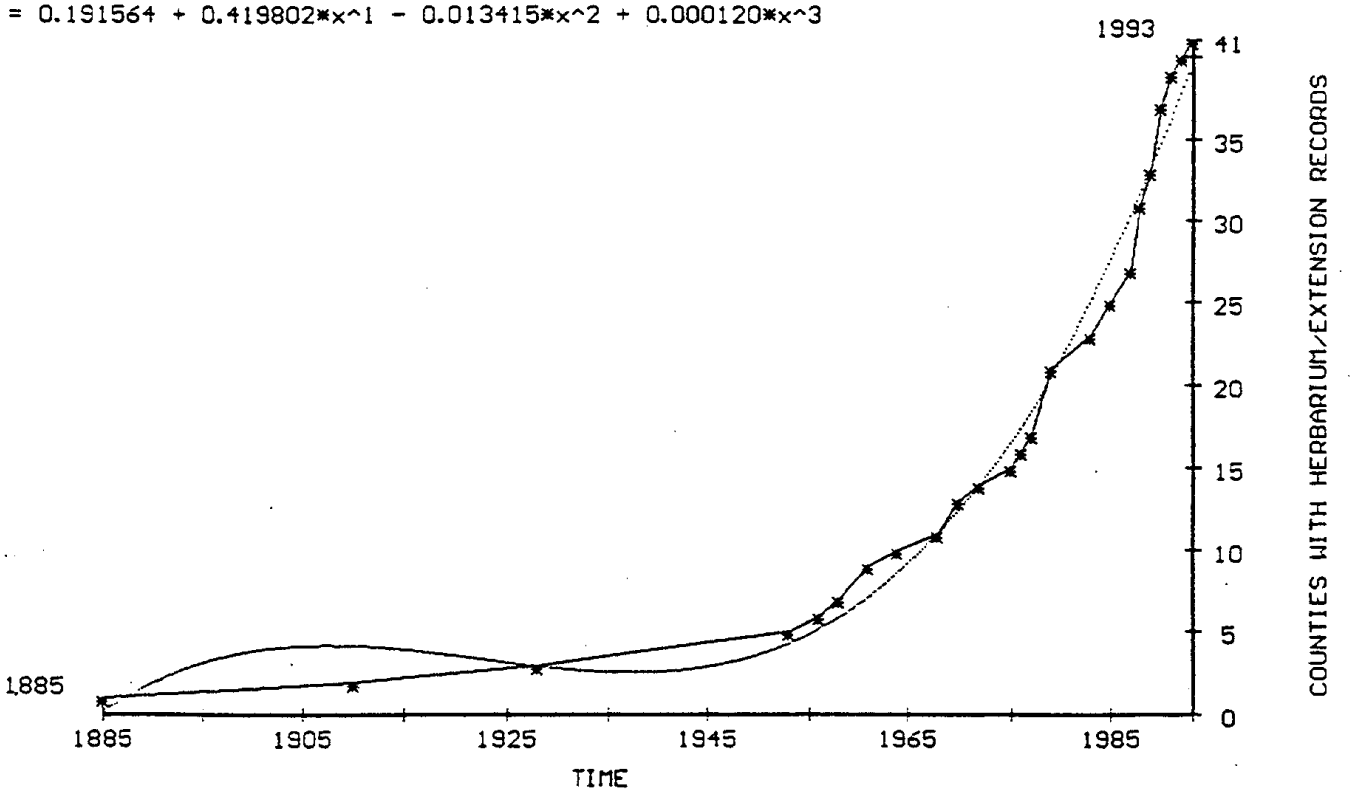
These plots show the current state of the model. The curve fitting method could be refined to provide a potentially more accurate model for estimating future expansion of exotics invading the Columbia Basin or historic distribution.

(REL 6.2) COUNTIES REPORTING ABUTILON THEOPHRASTI (VELVETLEAF), 1875-1995.

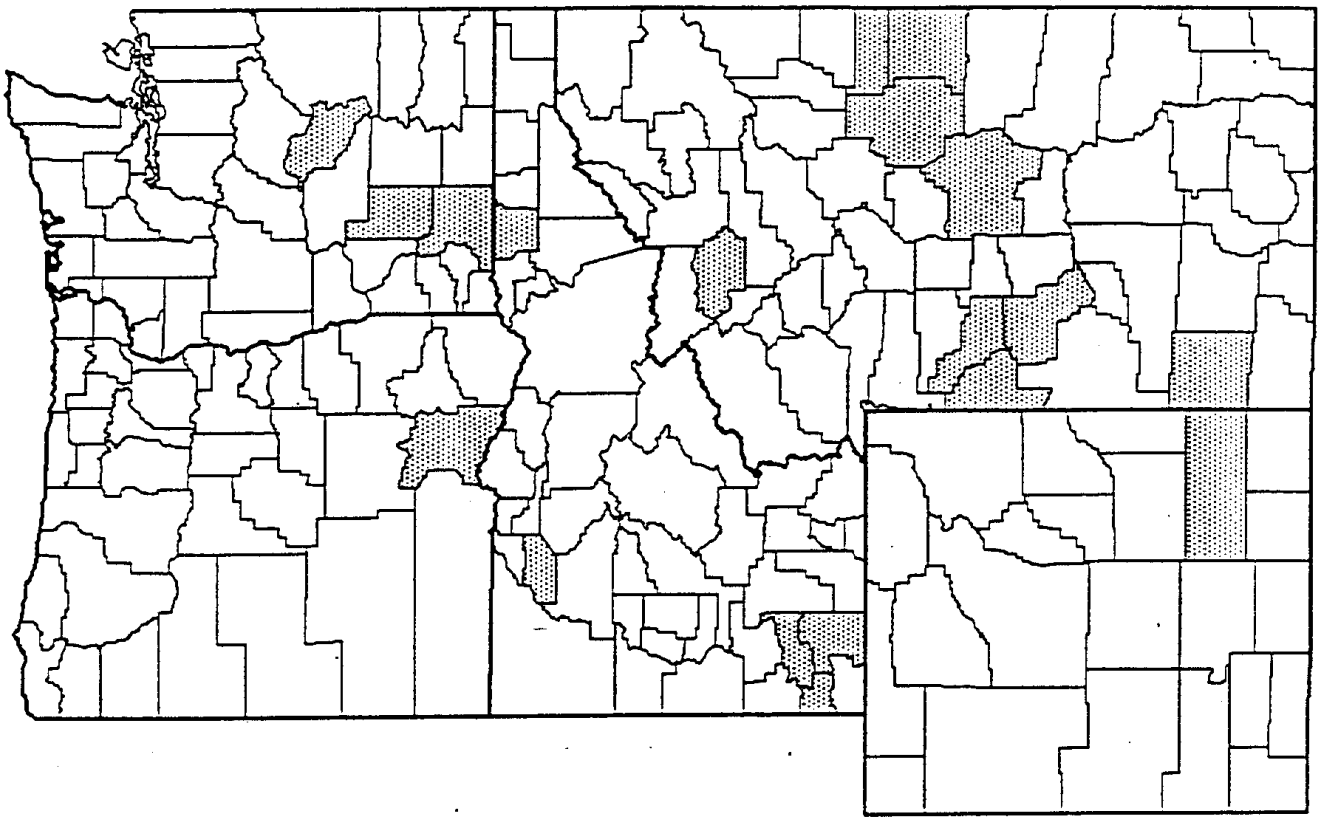


ABUTILON THEOPHRASTI INCREASE IN NORTHWEST STATES

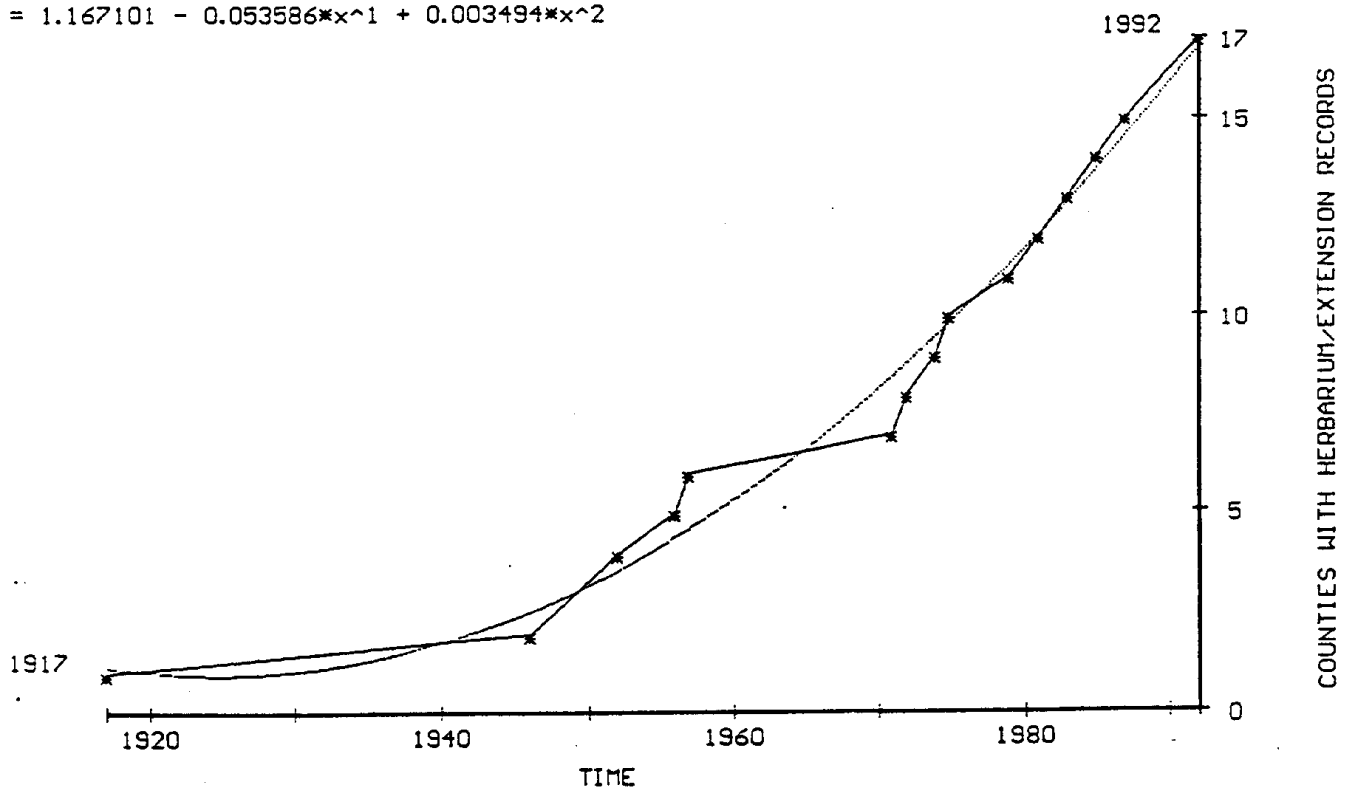
y = 0.191564 + 0.419802*x^1 - 0.013415*x^2 + 0.000120*x^3



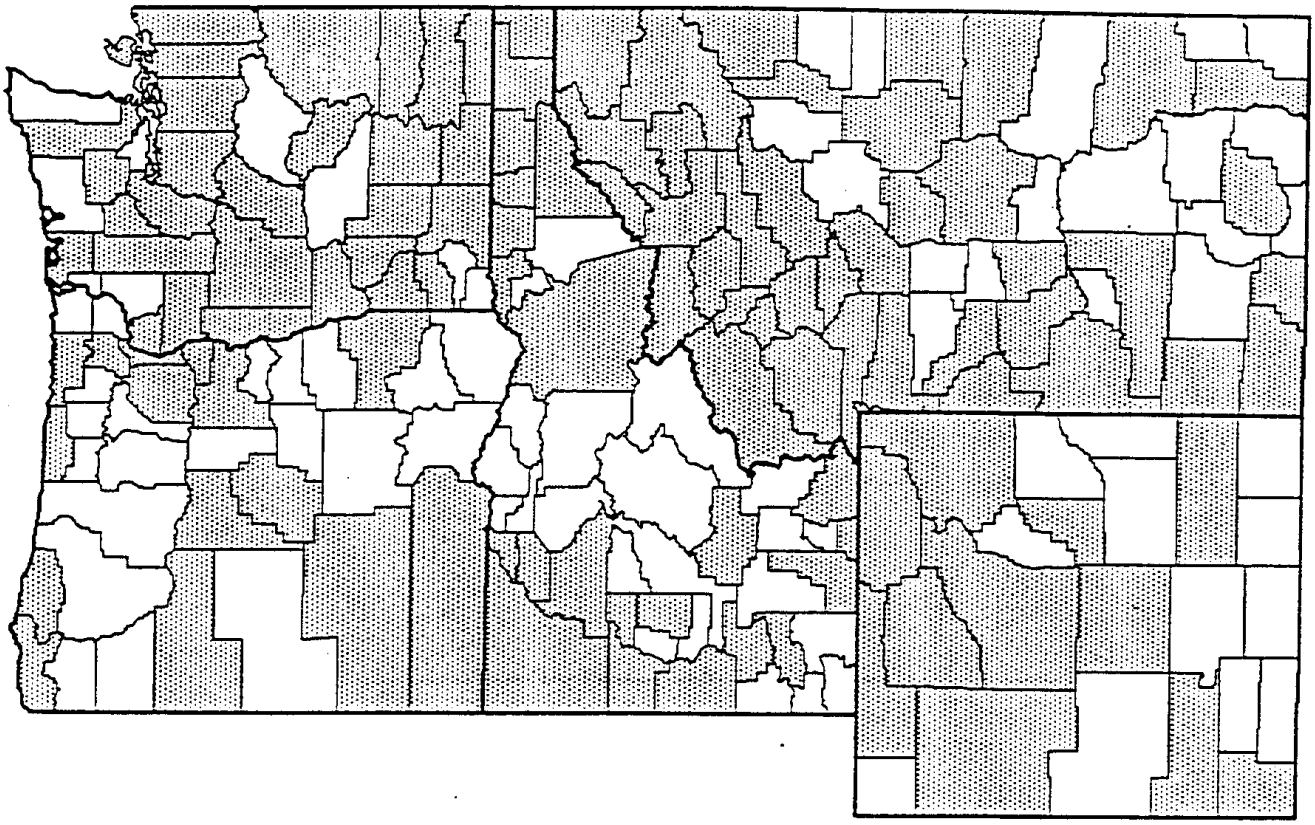
(REL 6.2) COUNTIES REPORTING AEGILOPS CYLINDRICA (JOINTED GOATGRASS), 1875-1995.



AEGILOPS CYLINDRICA INCREASE IN NORTHWEST STATES
y = 1.167101 - 0.053586*x^1 + 0.003494*x^2

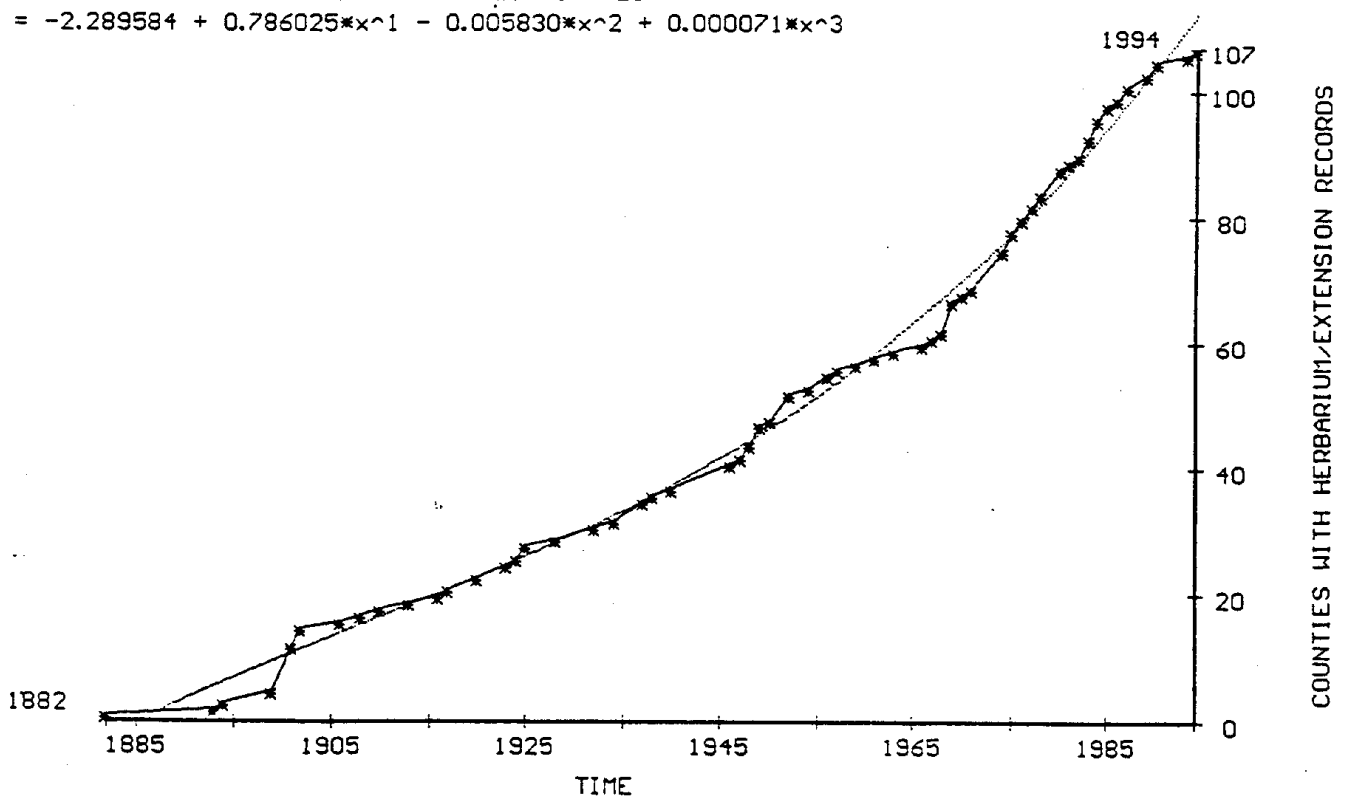


(REL 6.2) COUNTIES REPORTING AGROPYRON REPENS (QUACKGRASS), 1875-1995.

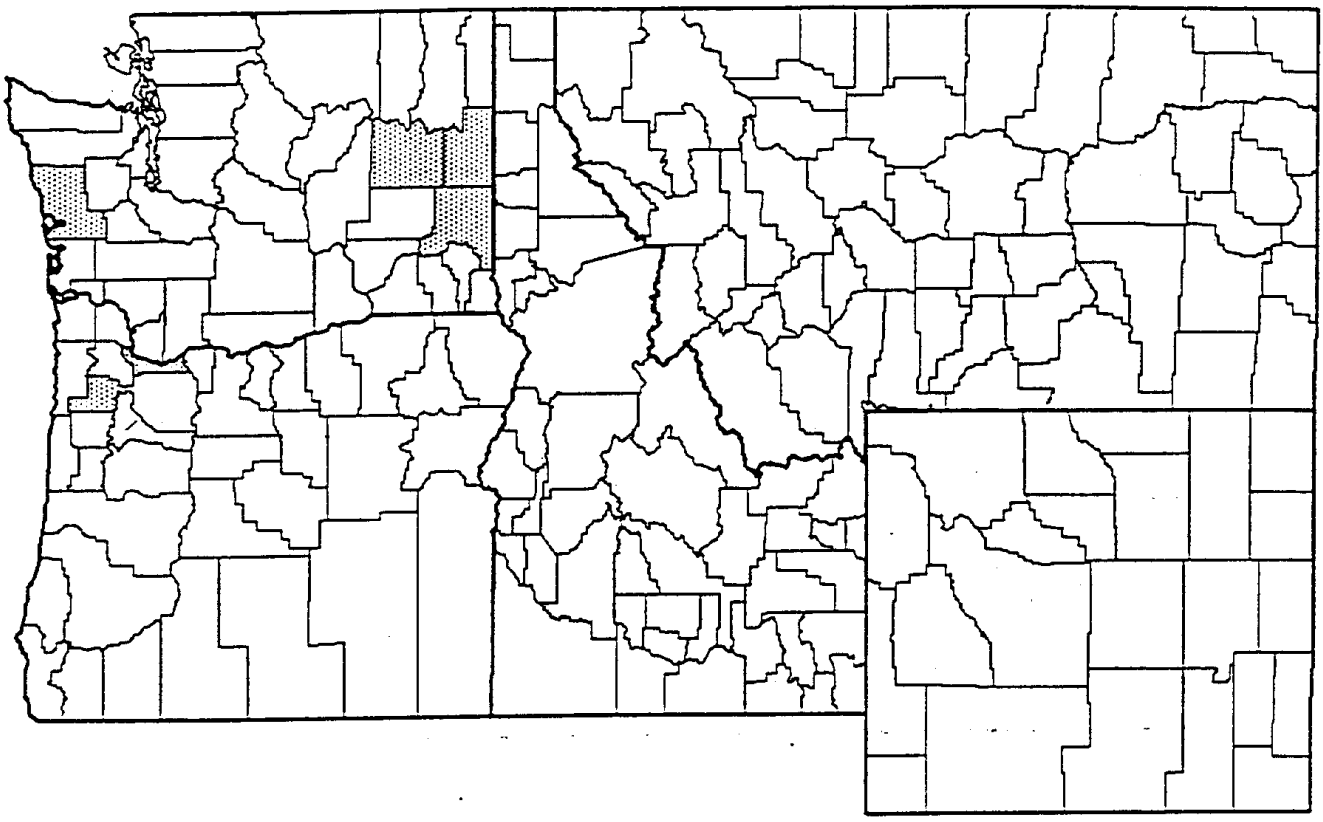


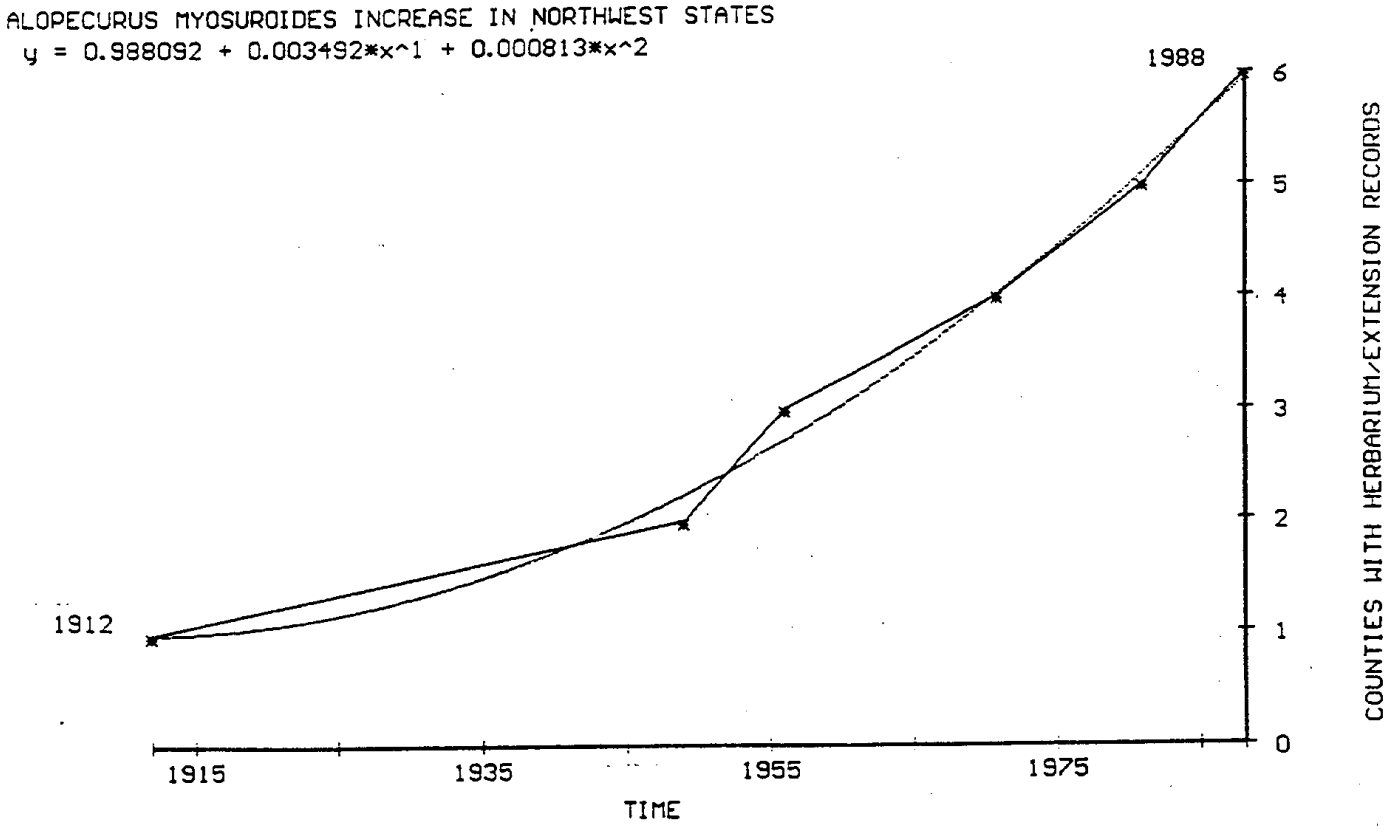
AGROPYRON REPENS INCREASE IN NORTHWEST STATES

y = -2.289584 + 0.786025*x^1 - 0.005830*x^2 + 0.000071*x^3

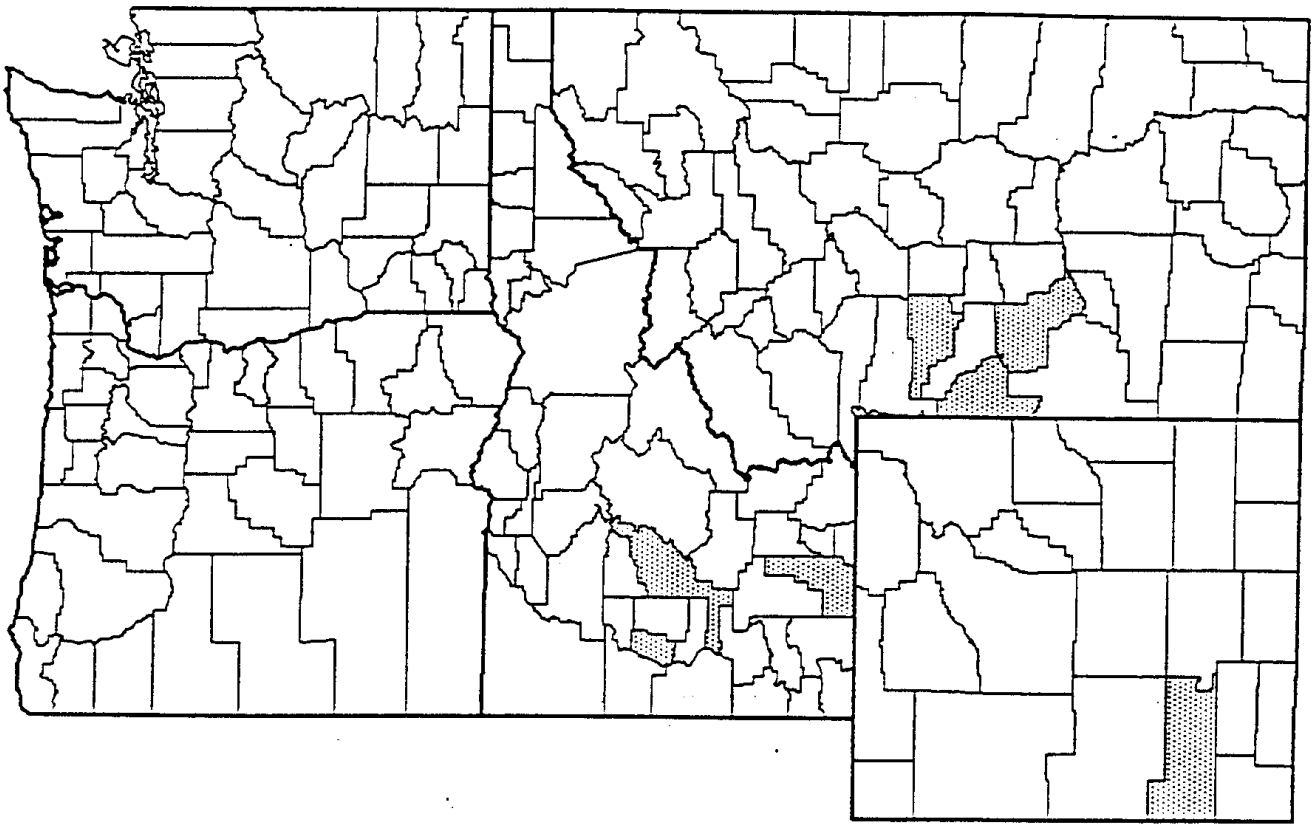


(REL 6.2) COUNTIES REPORTING ALOPECURUS MYOSUROIDES (BLACK TWITCH), 1875-1995.



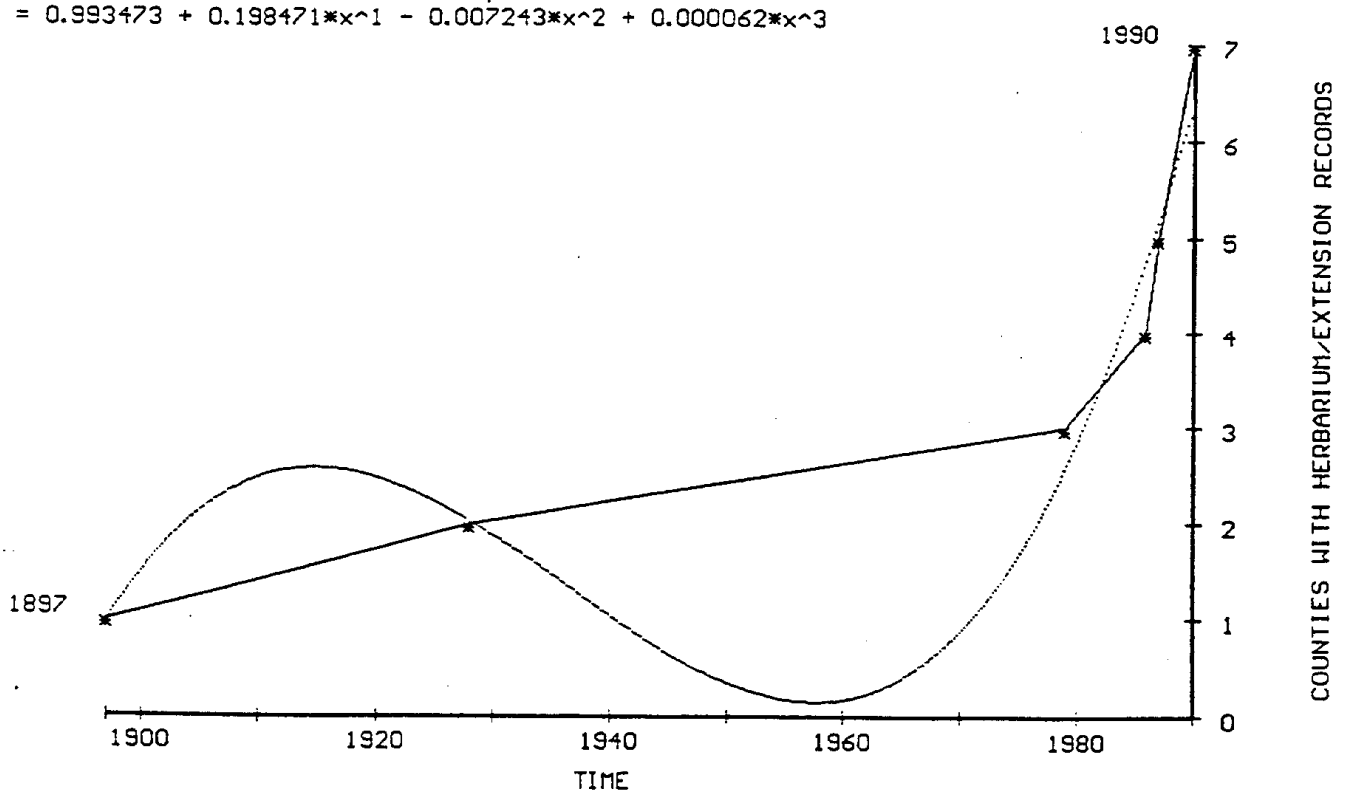


(REL 6.2) COUNTIES REPORTING AMBROSIA TOMENTOSA (SKELETONLEAF BURSAGE), 1875-1995.

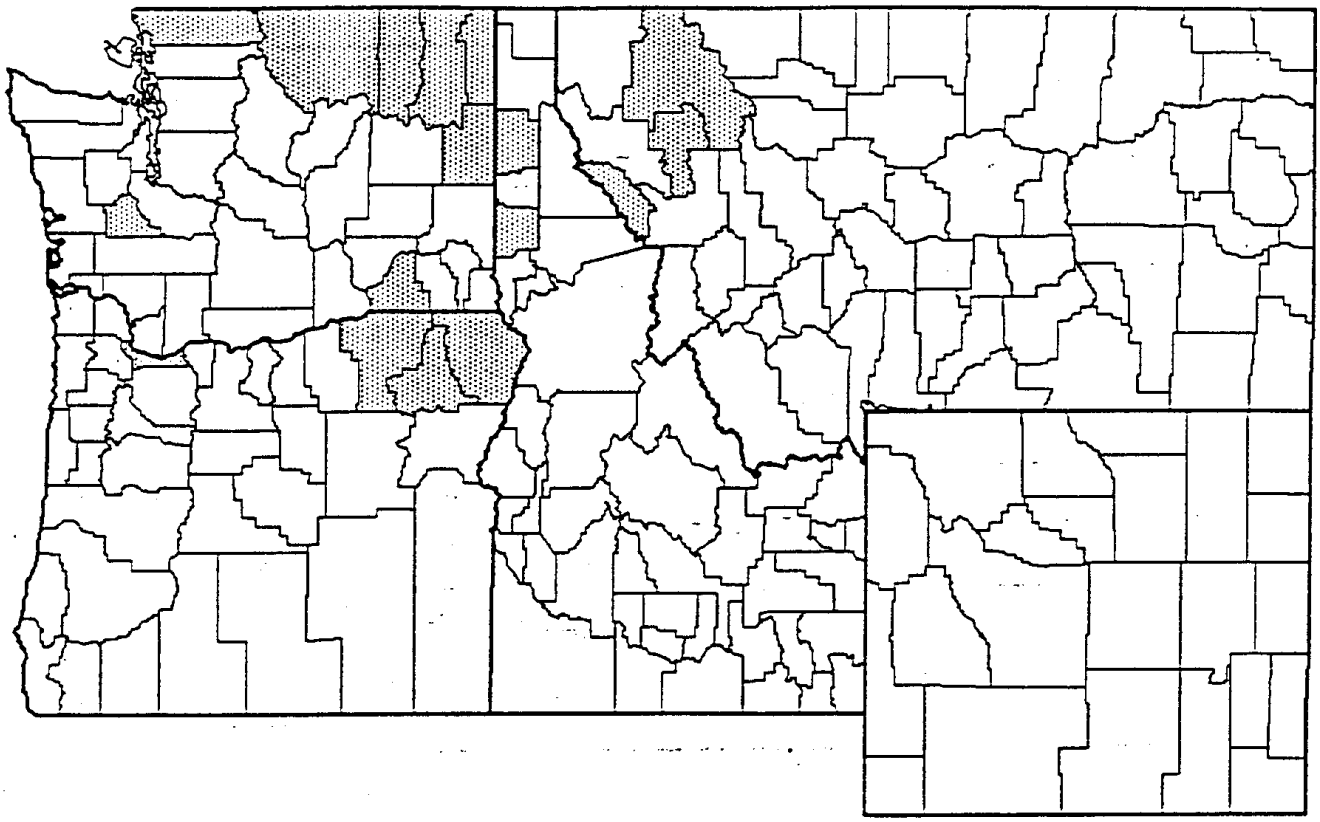


AMBROSIA TOMENTOSA INCREASE IN NORTHWEST STATES

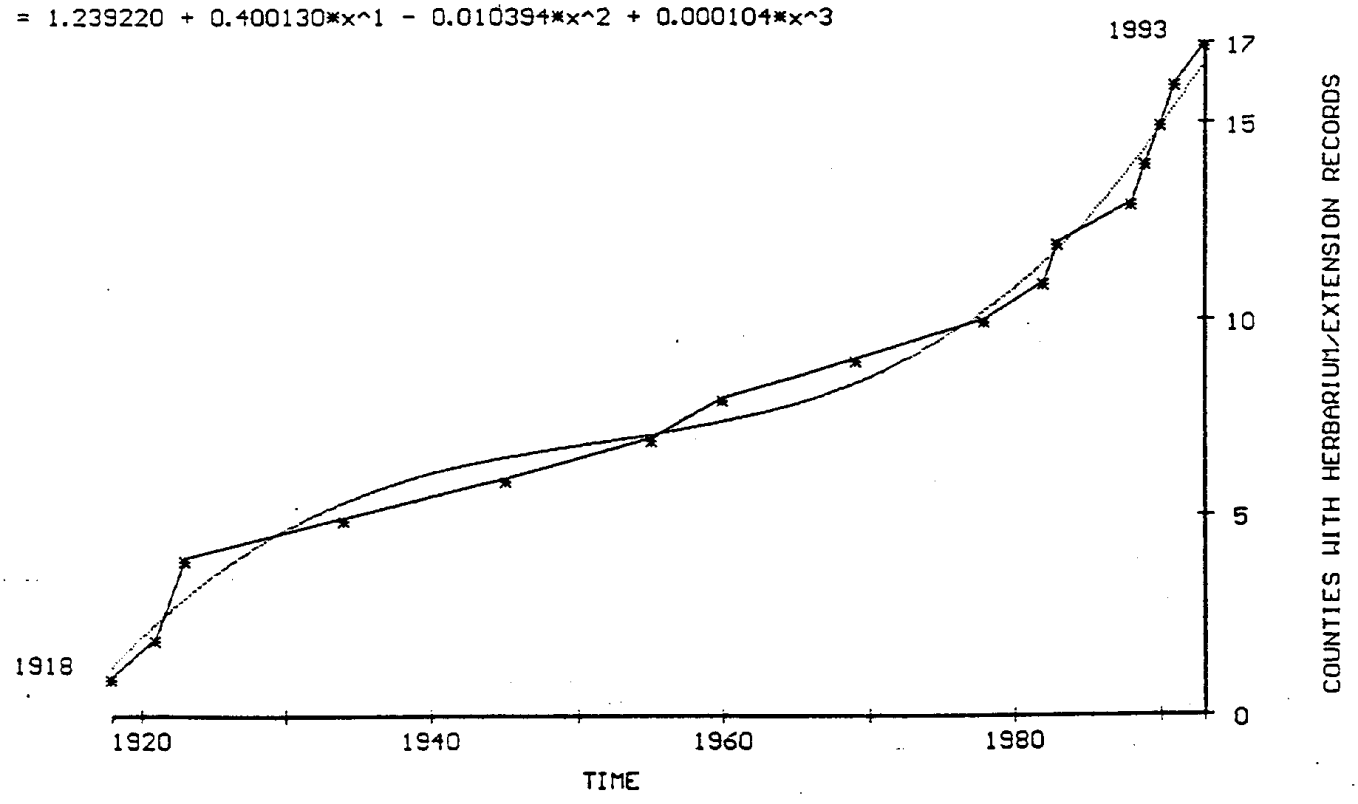
y = 0.993473 + 0.198471*x^1 - 0.007243*x^2 + 0.000062*x^3



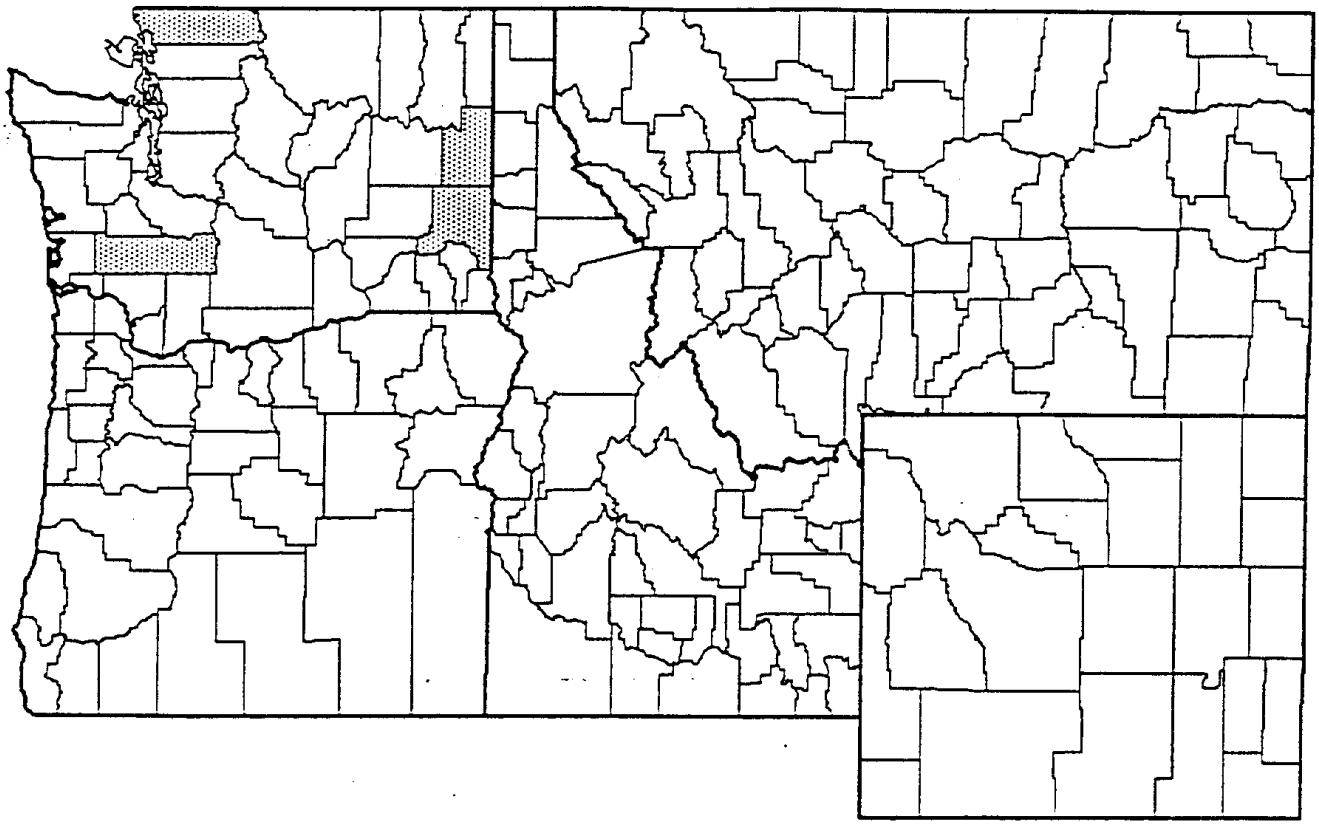
(REL 6.2) COUNTIES REPORTING ANCHUSA OFFICINALIS (COMMON BUGLOSS), 1875-1995.



ANCHUSA OFFICINALIS INCREASE IN NORTHWEST STATES
y = 1.239220 + 0.400130*x^1 - 0.010394*x^2 + 0.000104*x^3

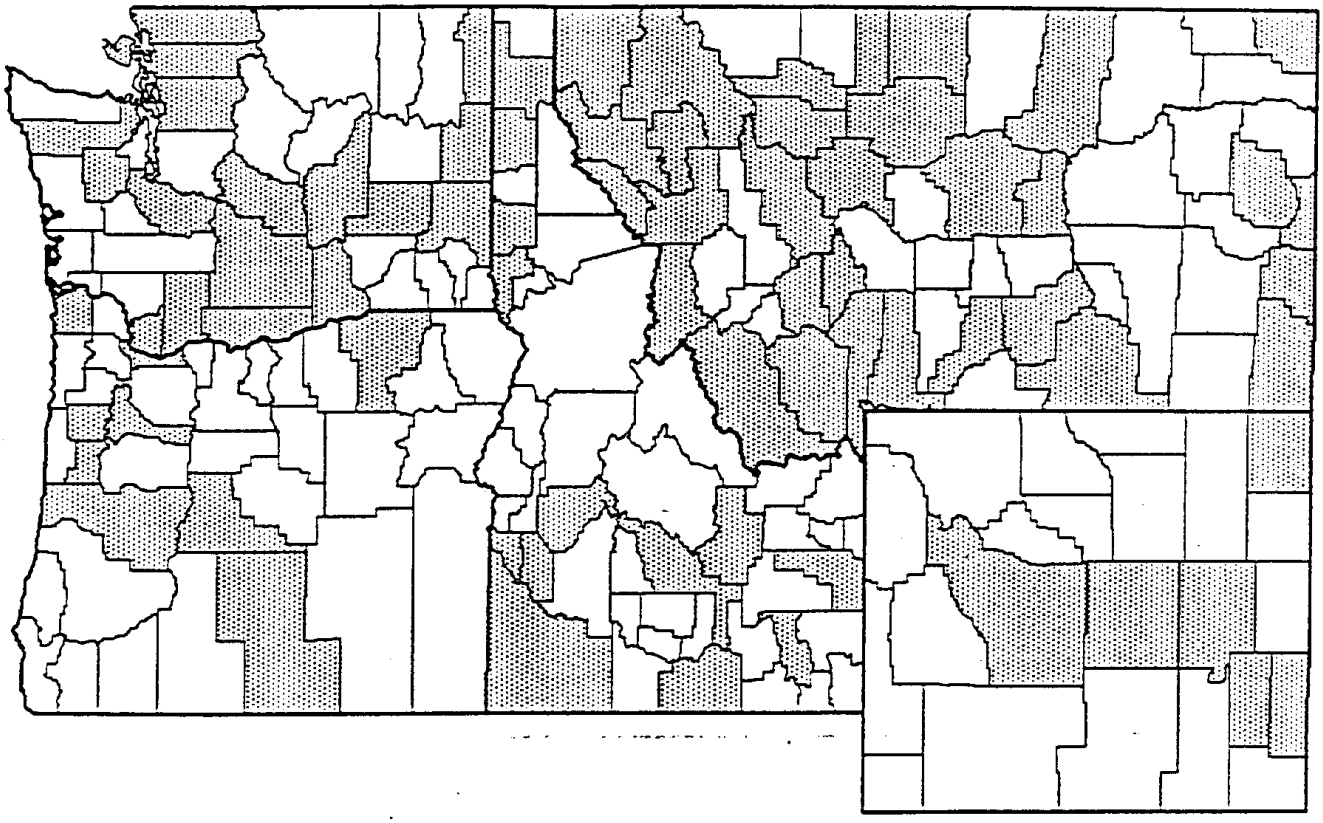


(REL 6.2) COUNTIES REPORTING ANTHRISCUS SYLVESTRIS (COW PARSELY), 1875-1995.

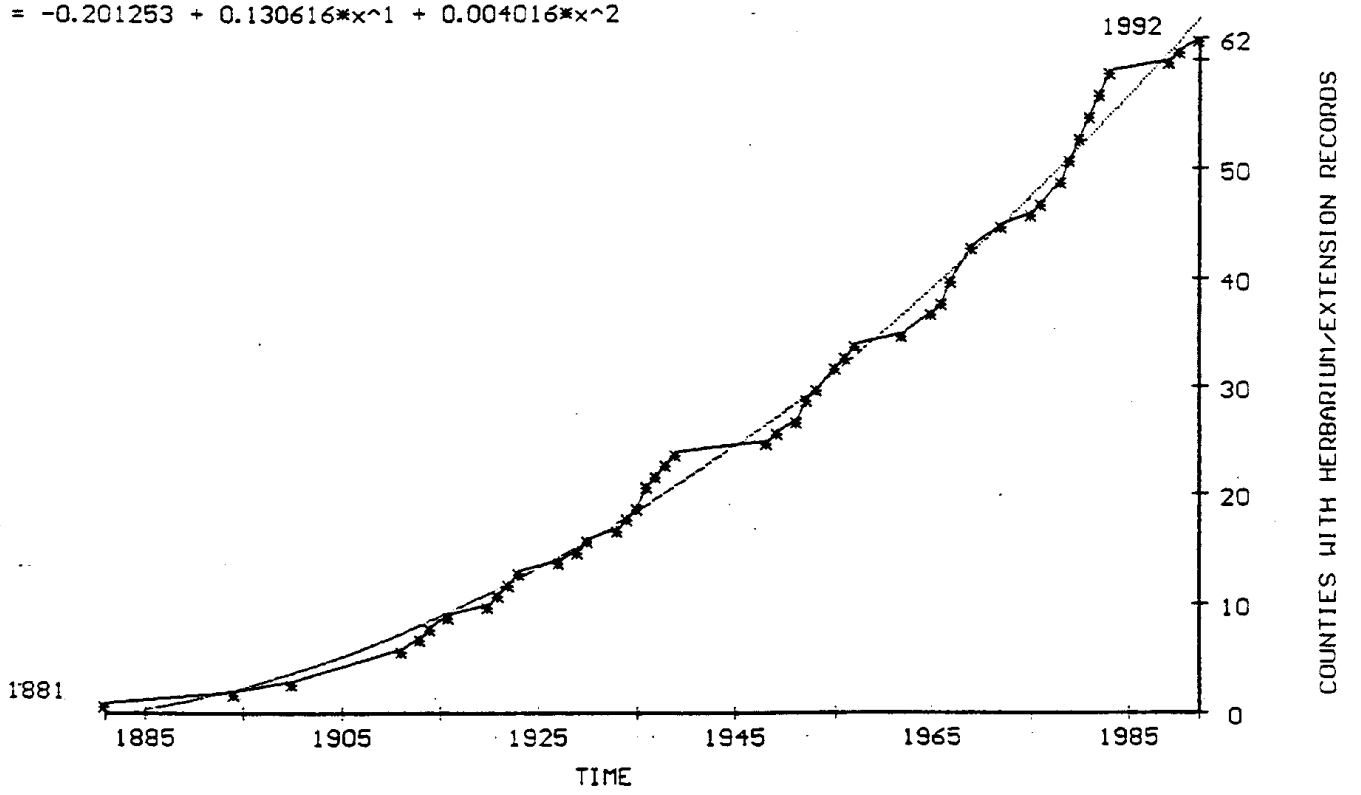


ANTHRISCUS SYLVESTRIS INCREASE IN NORTHWEST STATES

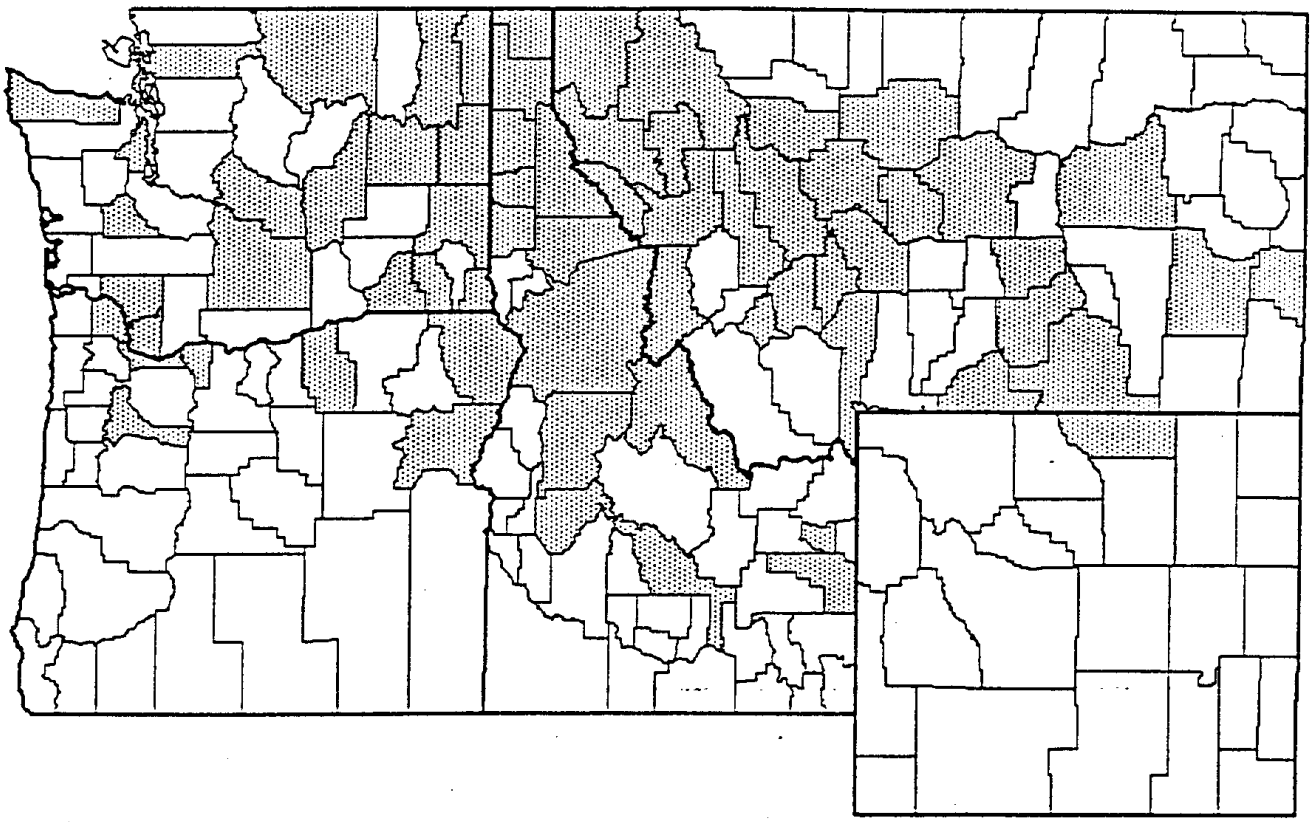
(REL 6.2) COUNTIES REPORTING ARCTIUM MINUS (COMMON BURDOCK), 1875-1995.

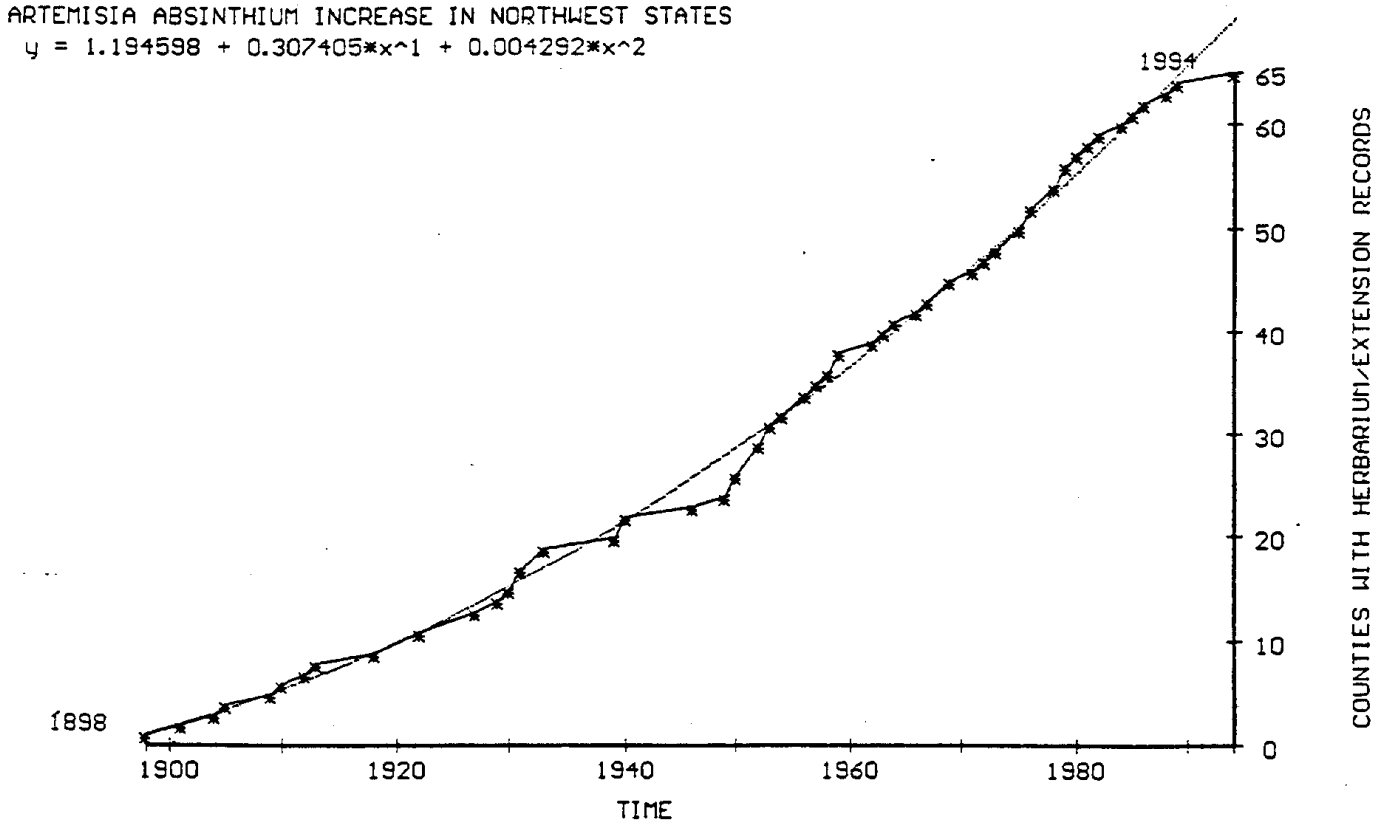


ARCTIUM MINUS INCREASE IN NORTHWEST STATES
y = -0.201253 + 0.130616*x^1 + 0.004016*x^2

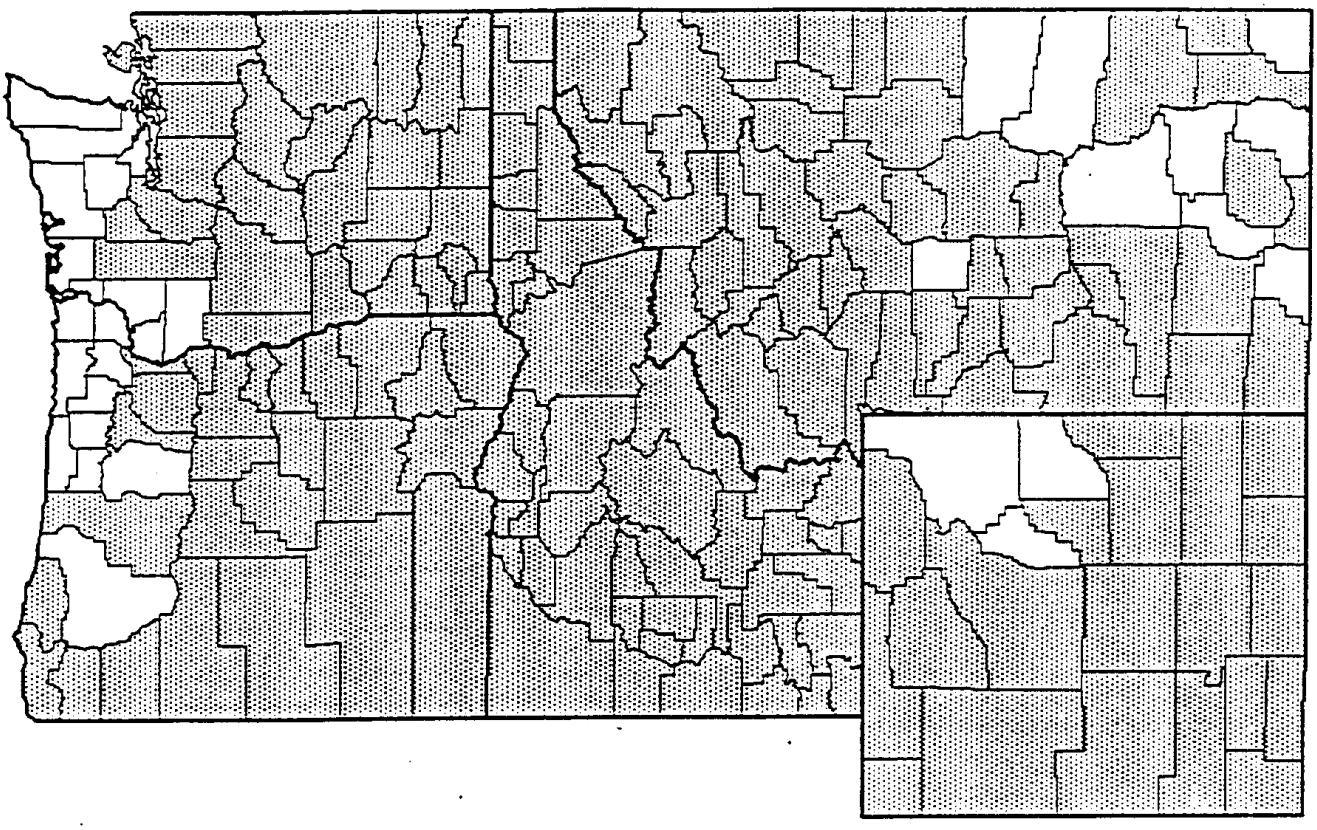


(REL 6.2) COUNTIES REPORTING ARTEMISIA ABSINTHIUM (ABSINTH WORMWOOD), 1875-1995.



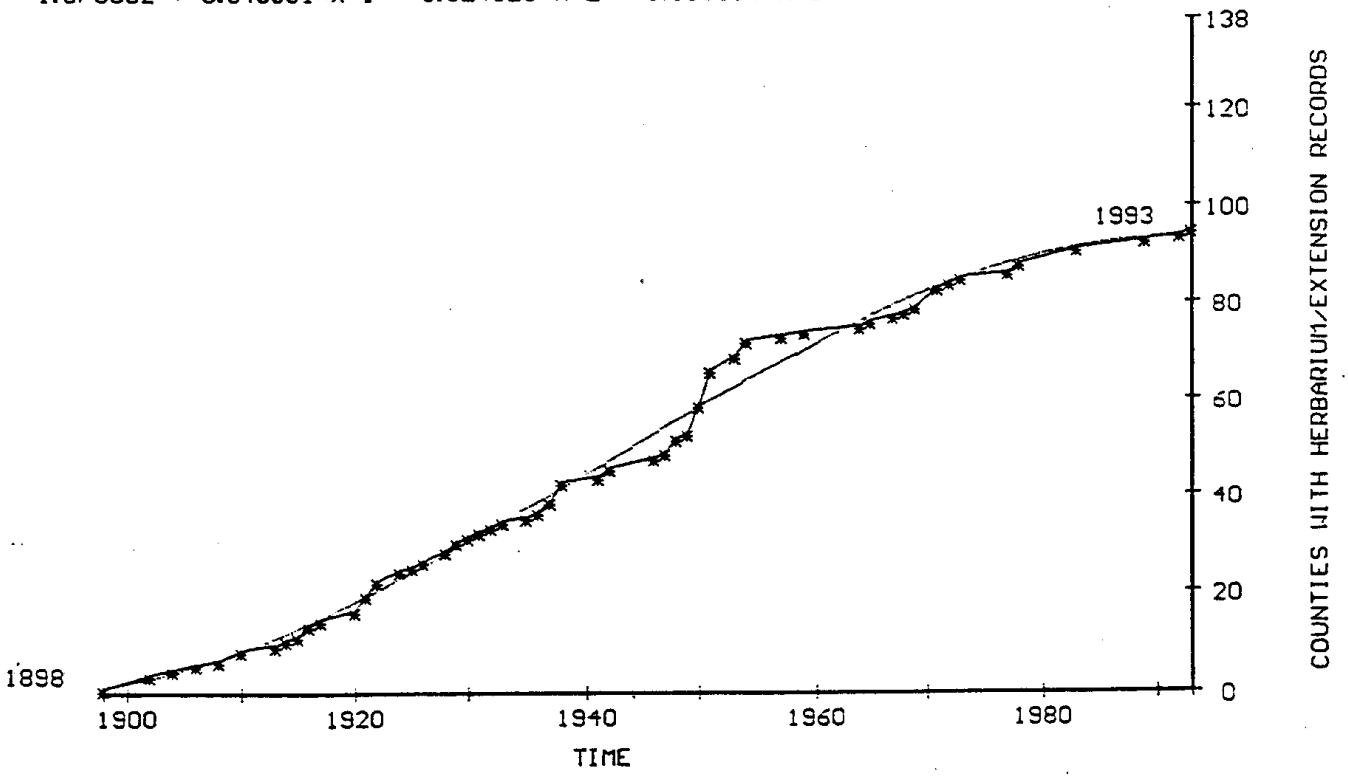


(REL 6.2) COUNTIES REPORTING BROMUS TECTORUM (DOWNY BROME), 1875-1995.

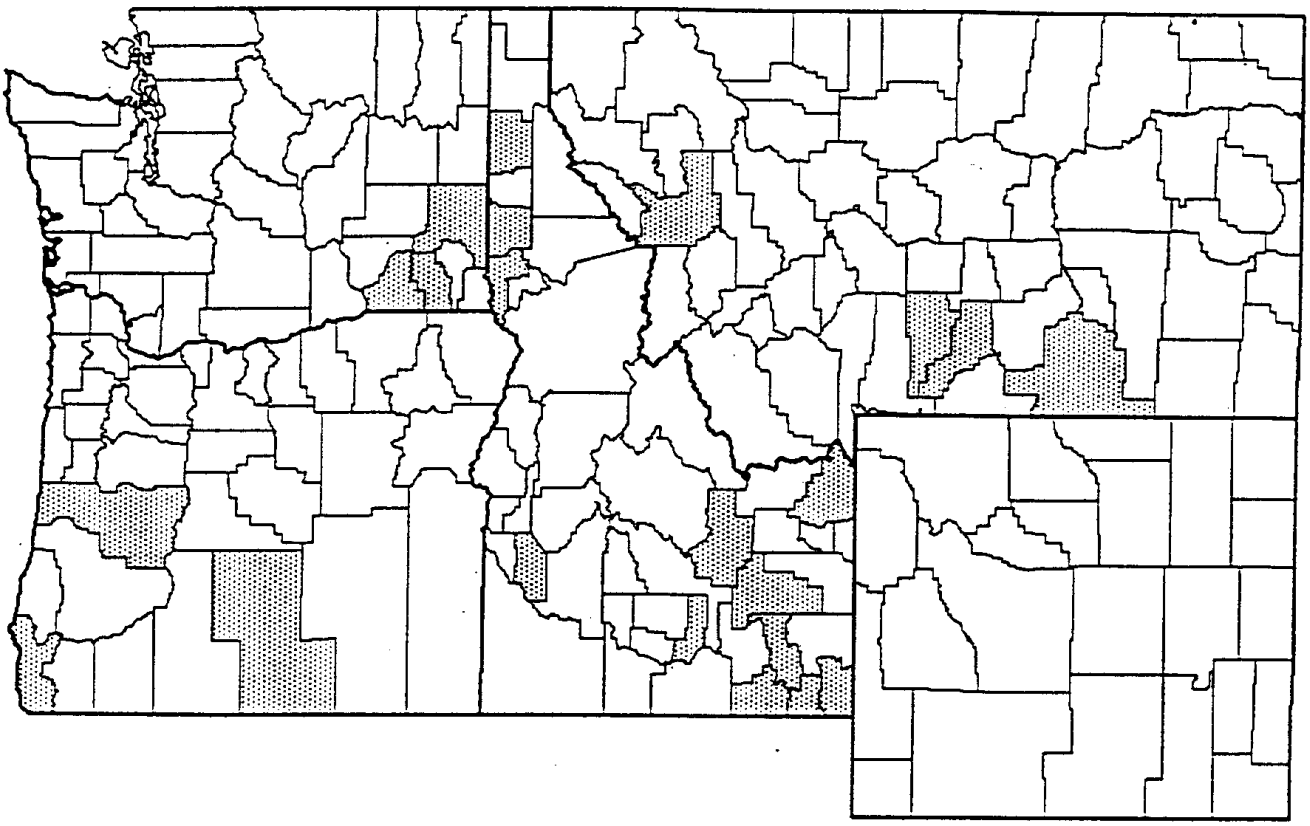


BROMUS TECTORUM INCREASE IN NORTHWEST STATES

y = 1.378952 + 0.345991*x^1 + 0.024026*x^2 - 0.000184*x^3

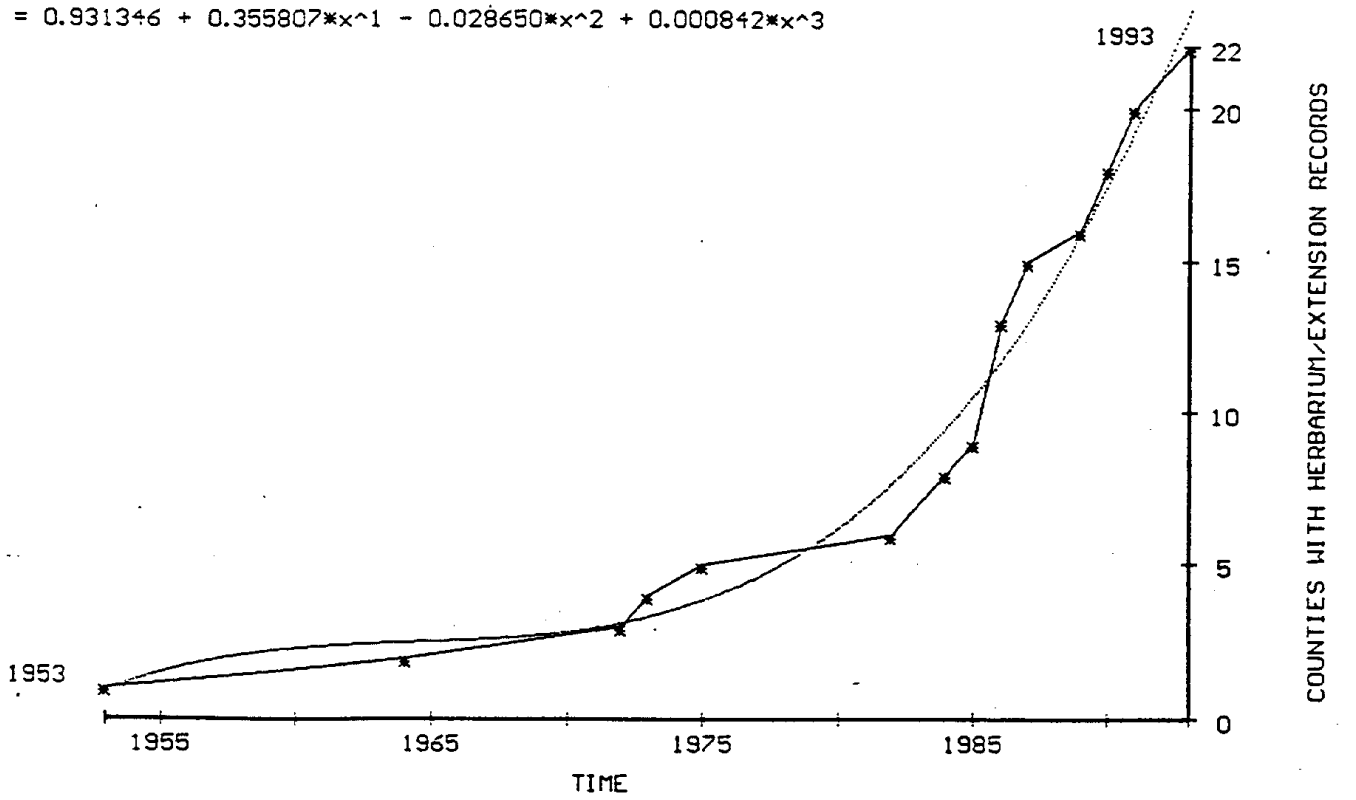


(REL 6.2) COUNTIES REPORTING BRYONIA ALBA (WHITE BRYONY), 1875-1995.

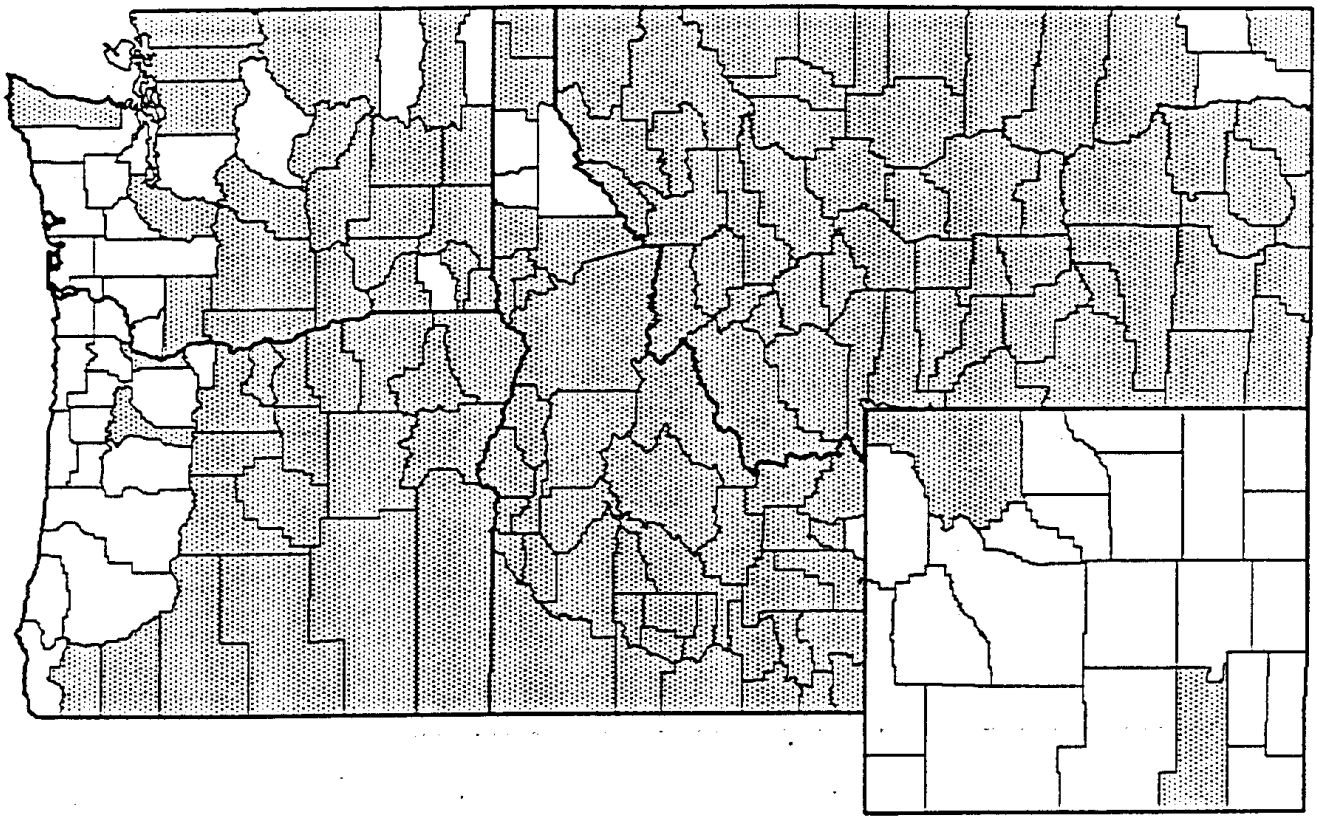


BRYONIA ALBA INCREASE IN NORTHWEST STATES

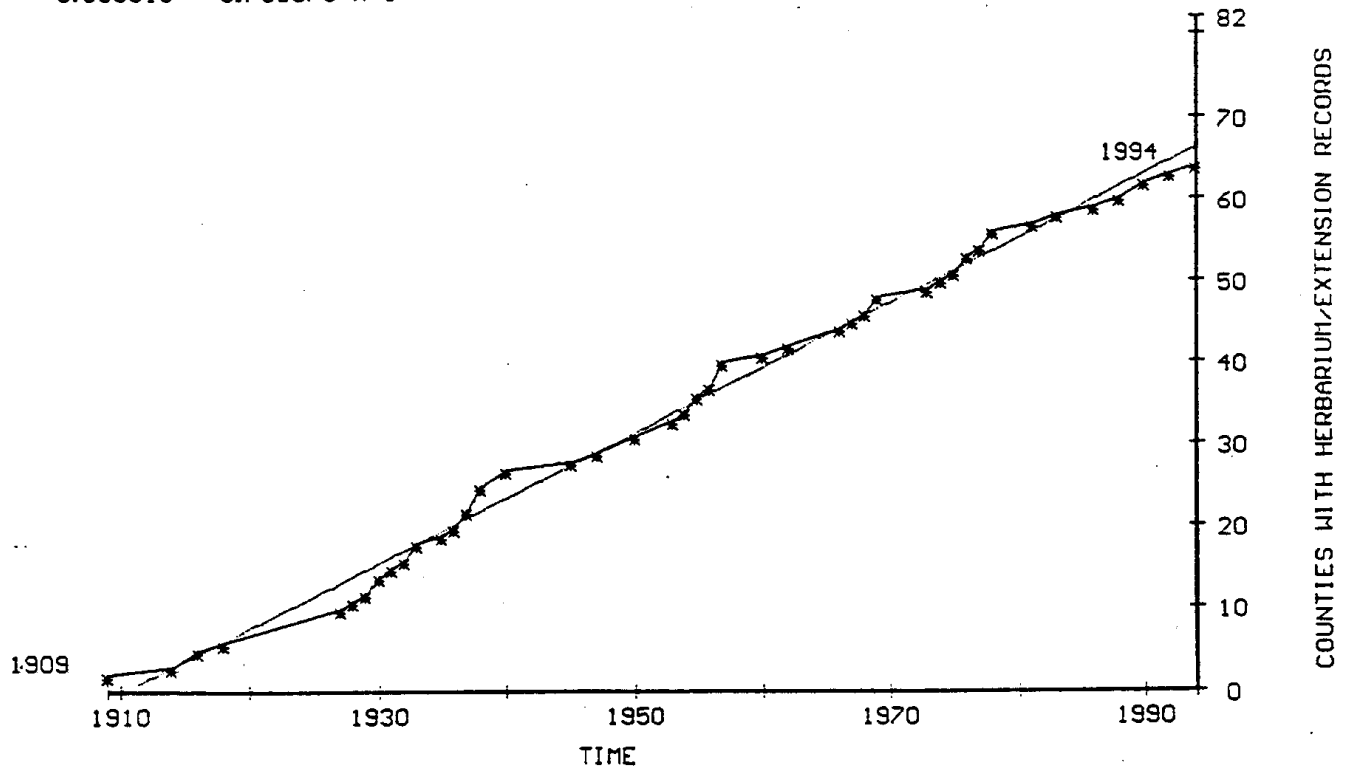
y = 0.931346 + 0.355807*x^1 - 0.028650*x^2 + 0.000842*x^3



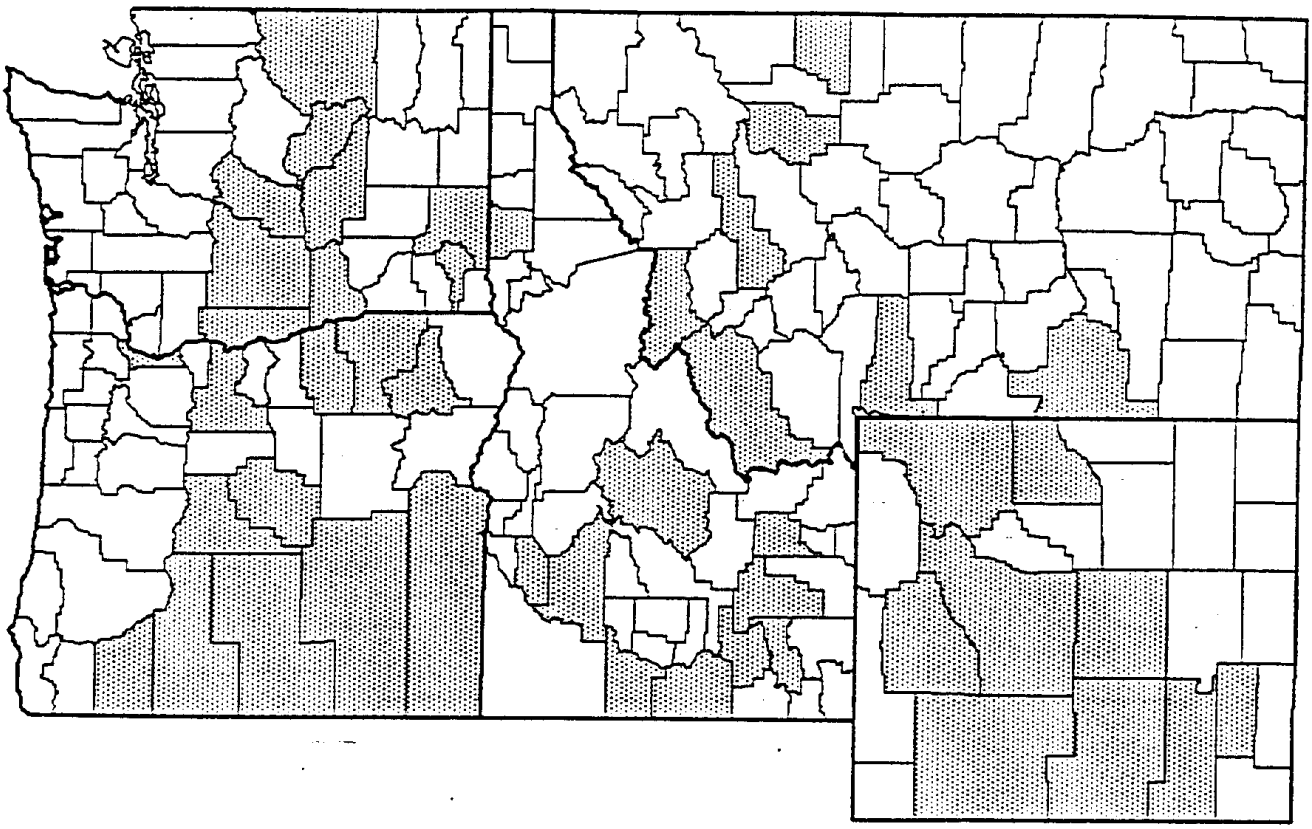
(REL 6.2) COUNTIES REPORTING CARDARIA DRABA (HOARY CRESS), 1875-1995.



CARDARIA DRABA INCREASE IN NORTHWEST STATES
y = -0.955315 + 0.790978*x^1

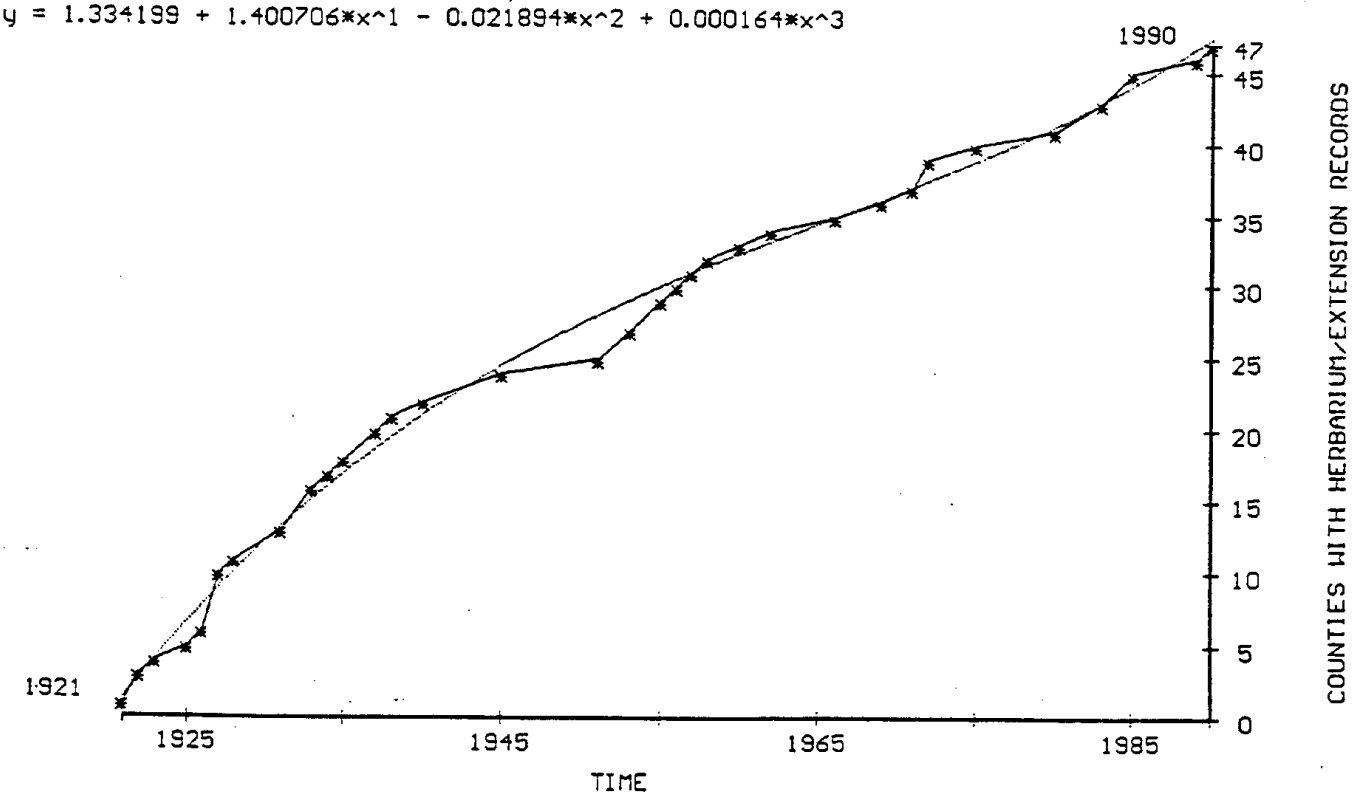


(REL 6.2) COUNTIES REPORTING CARDARIA PUBESCENS (HAIRY WHITETOP), 1875-1995.

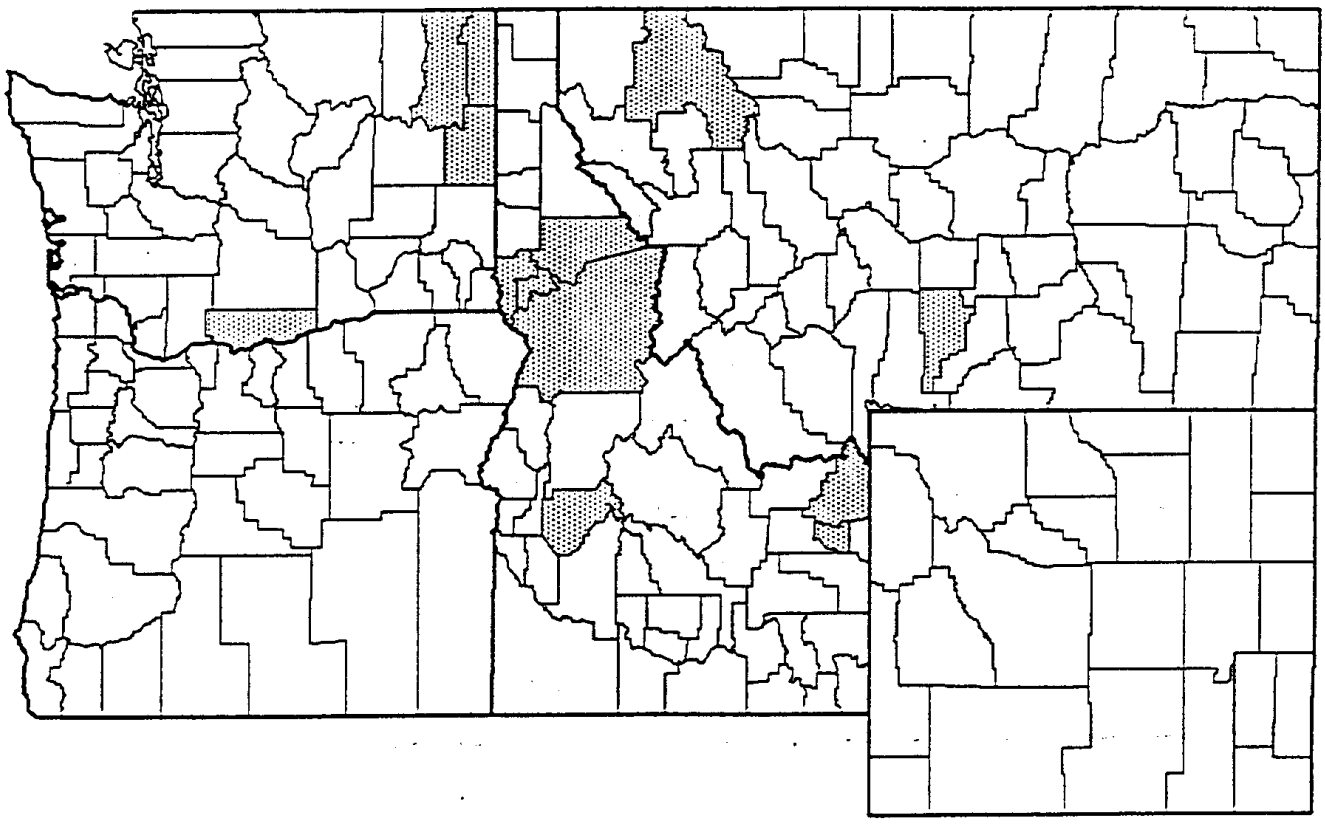


CARDARIA PUBESCENS INCREASE IN NORTHWEST STATES

y = 1.334199 + 1.400706*x^1 - 0.021894*x^2 + 0.000164*x^3

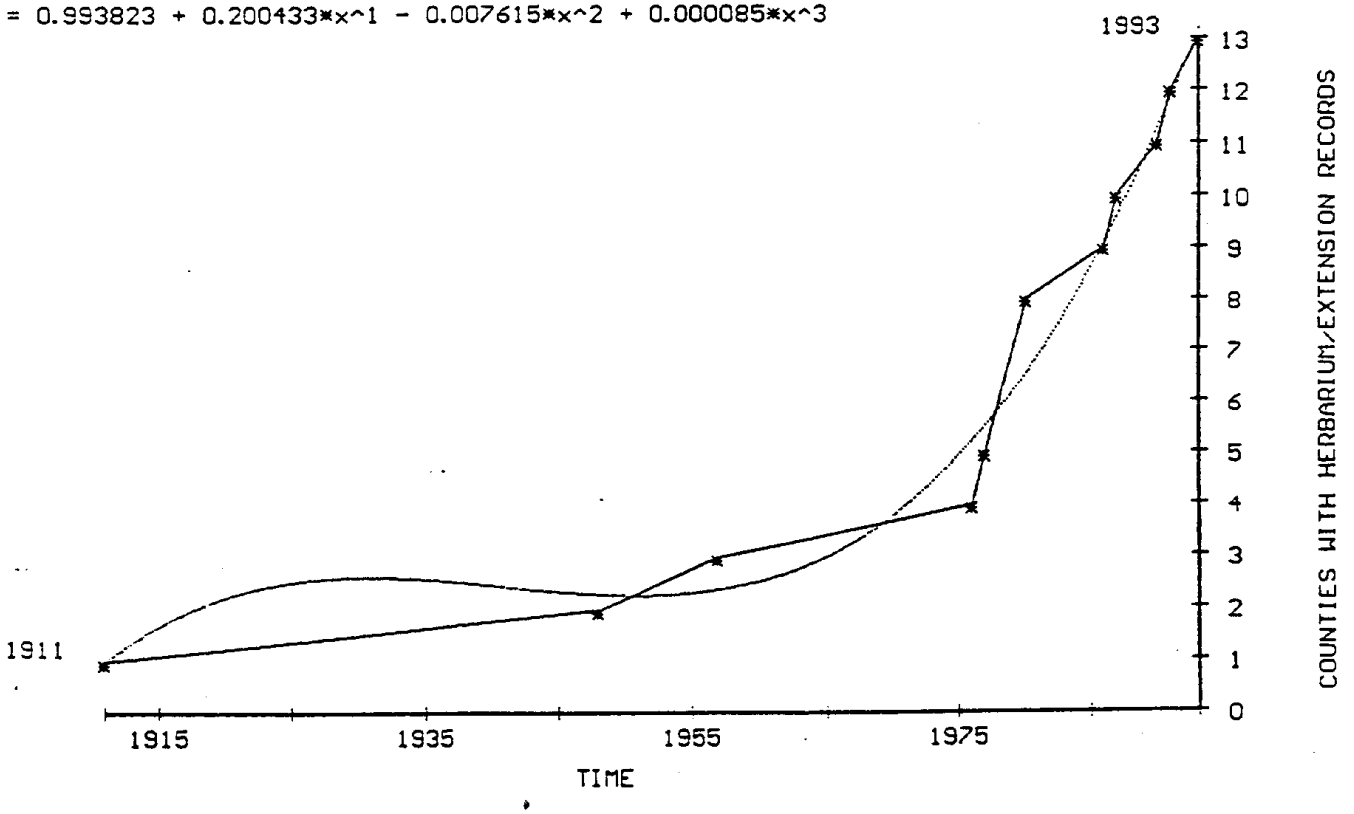


(REL 6.2) COUNTIES REPORTING CARDUUS ACANTHOIDES (PLUMELESS THISTLE), 1875-1995.

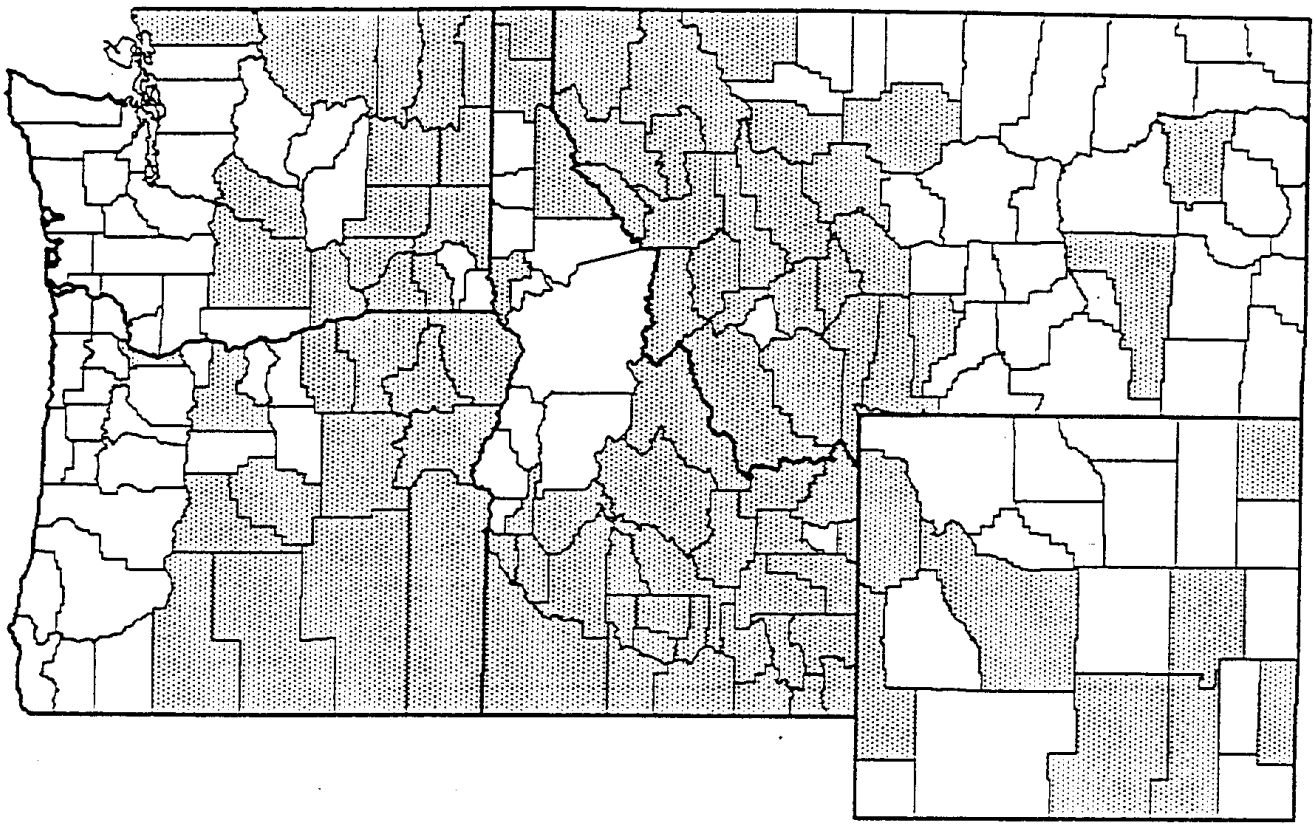


CARDUUS ACANTHOIDES INCREASE IN NORTHWEST STATES

y = 0.993823 + 0.200433*x^1 - 0.007615*x^2 + 0.000085*x^3

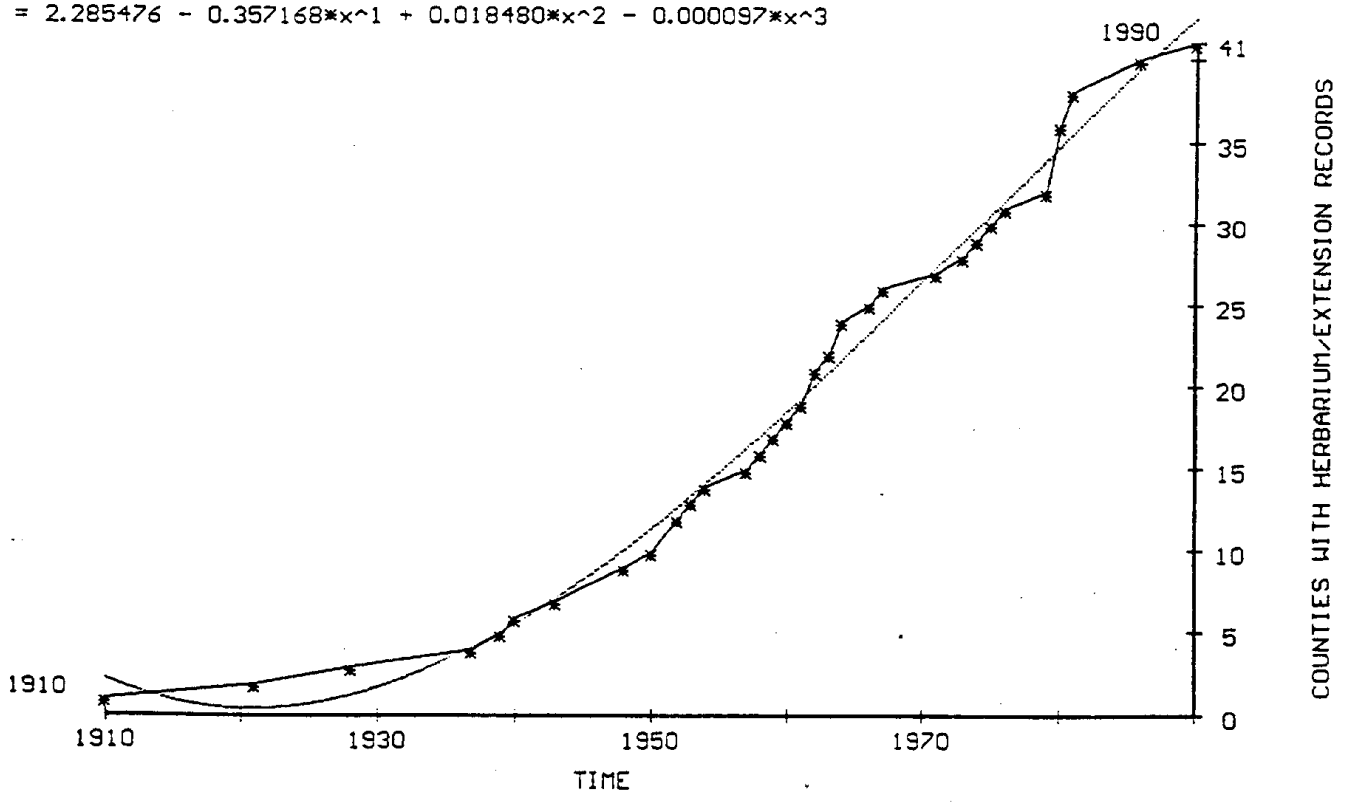


(REL 6.2) COUNTIES REPORTING CARDUUS NUTANS (MUSK THISTLE), 1875-1995.

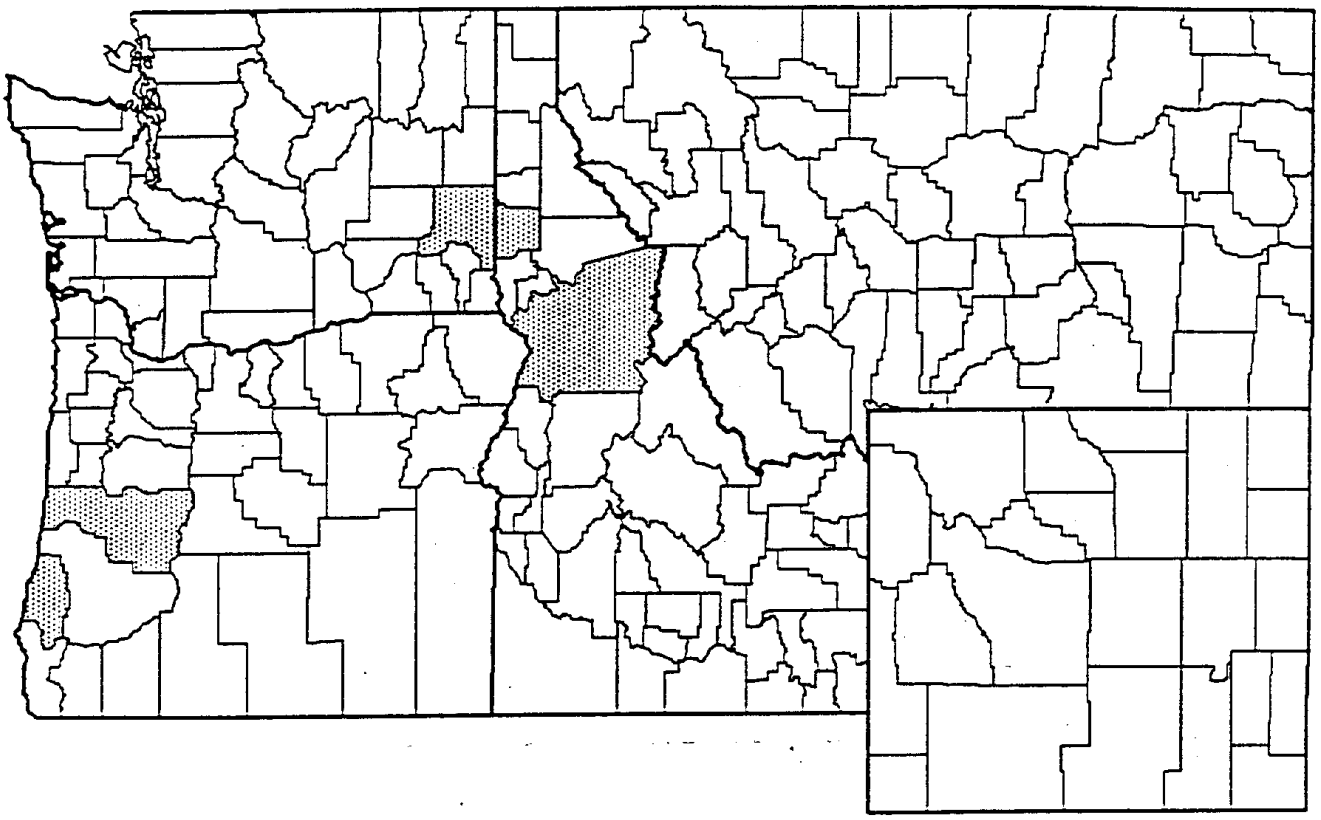


CARDUUS NUTANS INCREASE IN NORTHWEST STATES

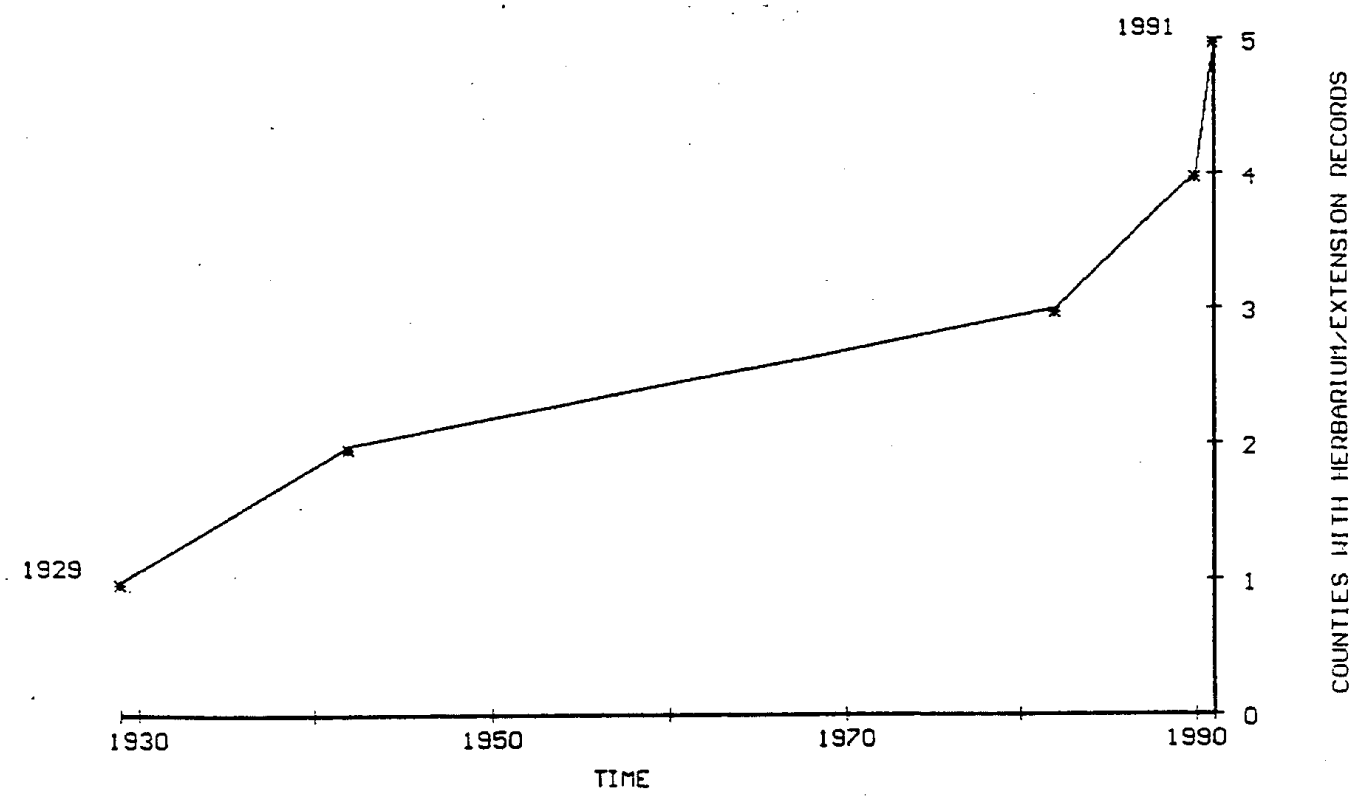
y = 2.285476 - 0.357168*x^1 + 0.018480*x^2 - 0.000097*x^3



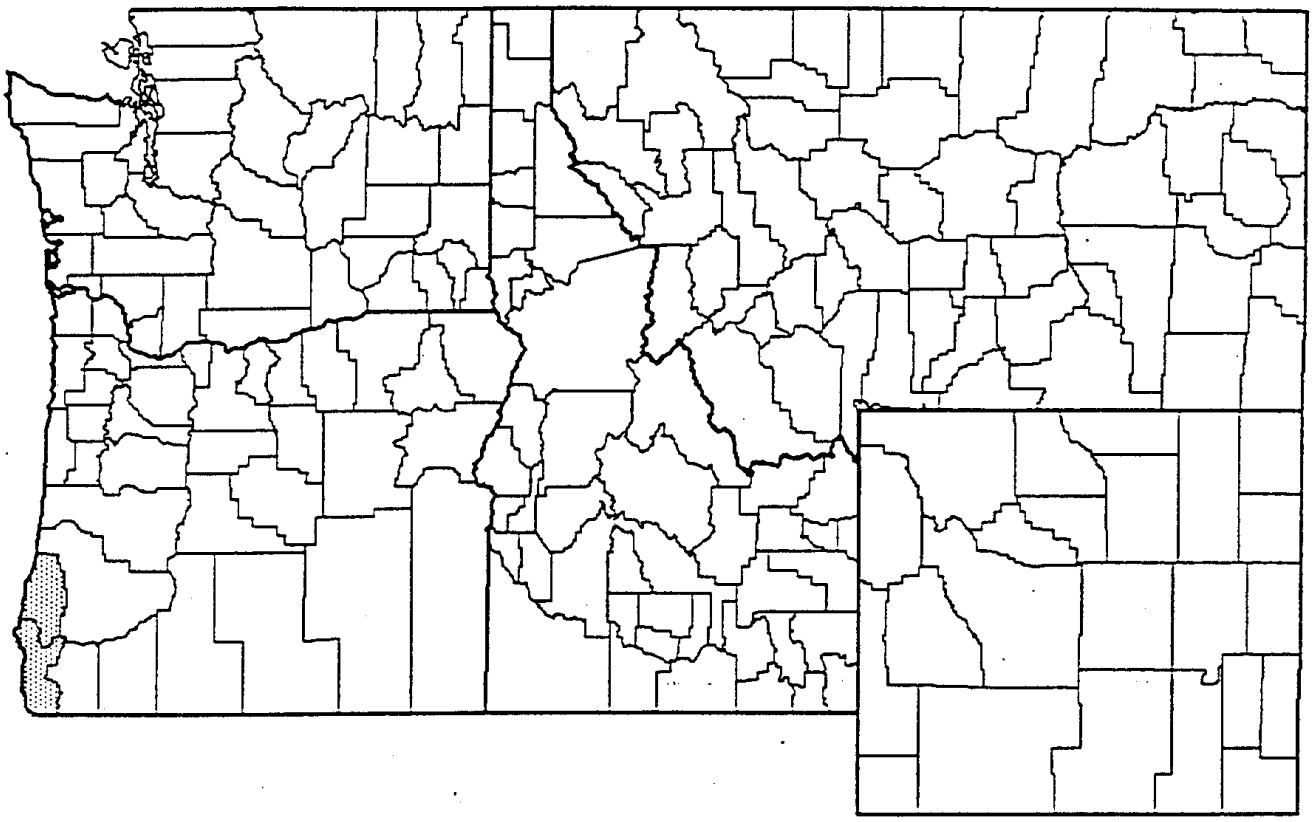
(REL 6.2) COUNTIES REPORTING CARDUUS PYCNOCEPHALUS (ITALIAN THISTLE), 1875-1995.



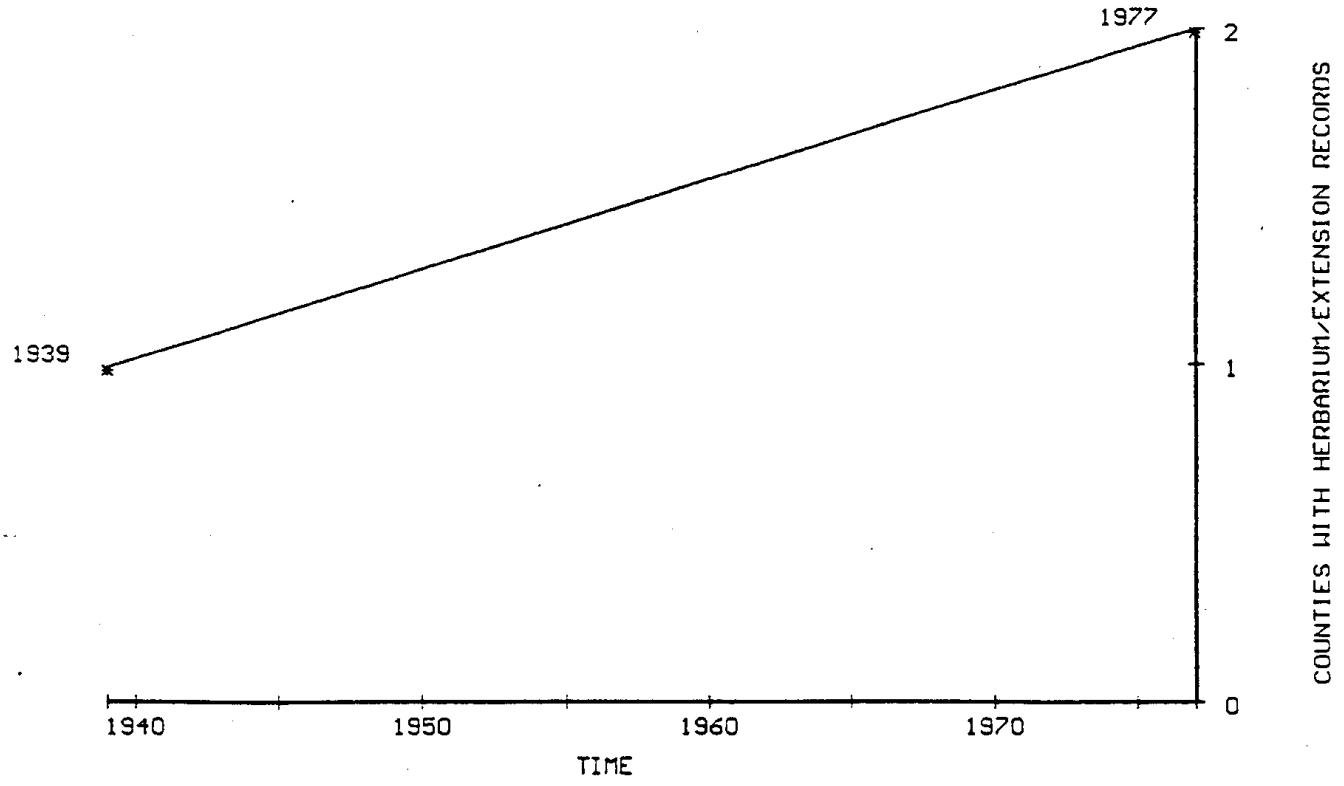
CARDUUS PYCNOCEPHALUS INCREASE IN NORTHWEST STATES



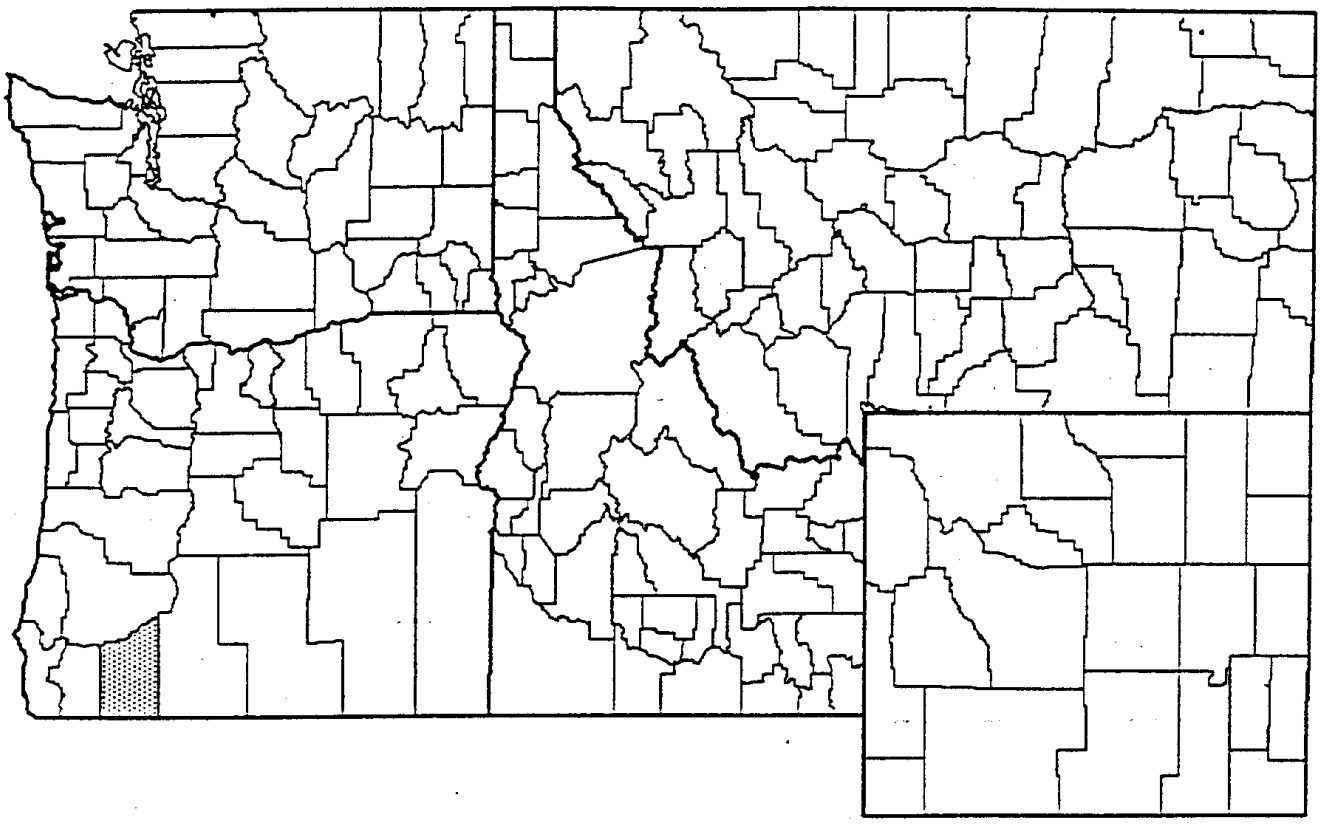
(REL 6.2) COUNTIES REPORTING CARDUUS TENUIFLORUS (DISTAFF THISTLE), 1875-1995.



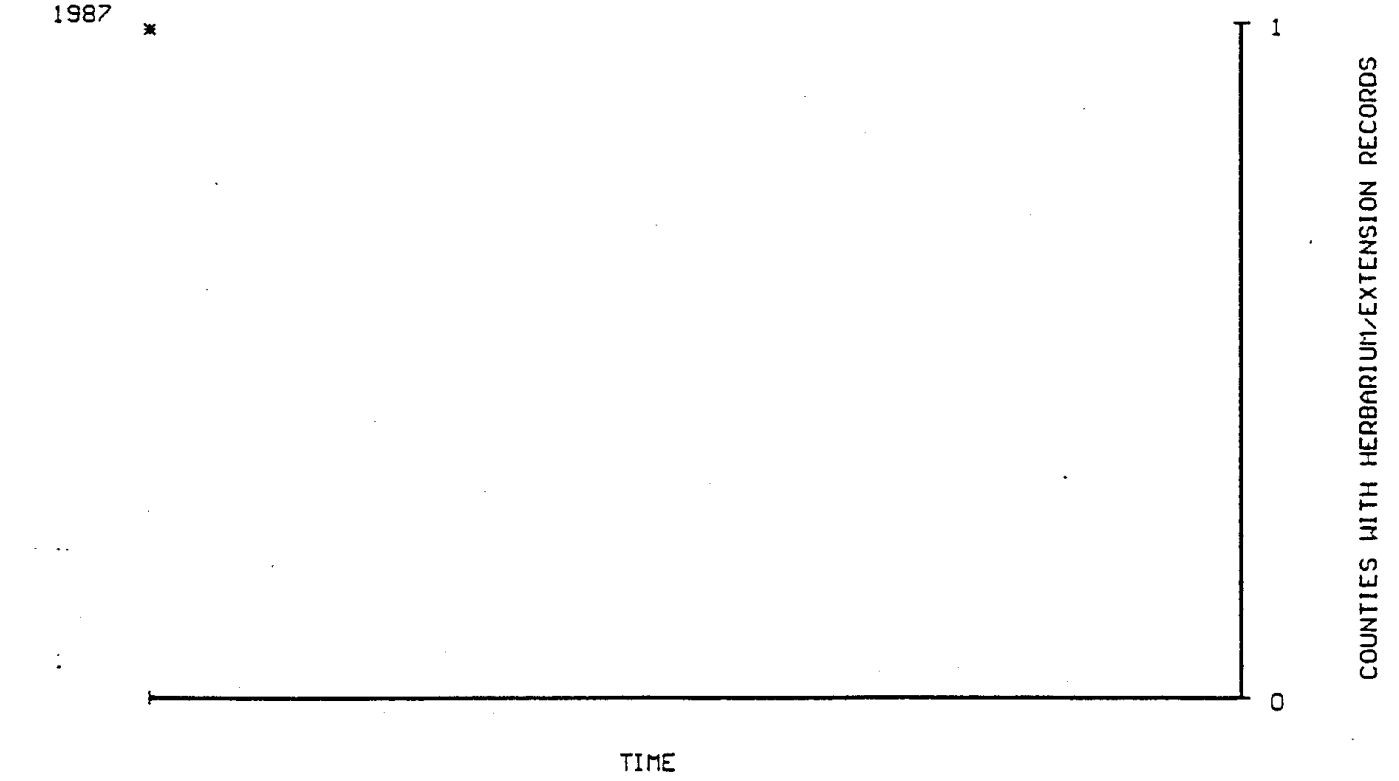
CARDUUS TENUIFLORUS INCREASE IN NORTHWEST STATES



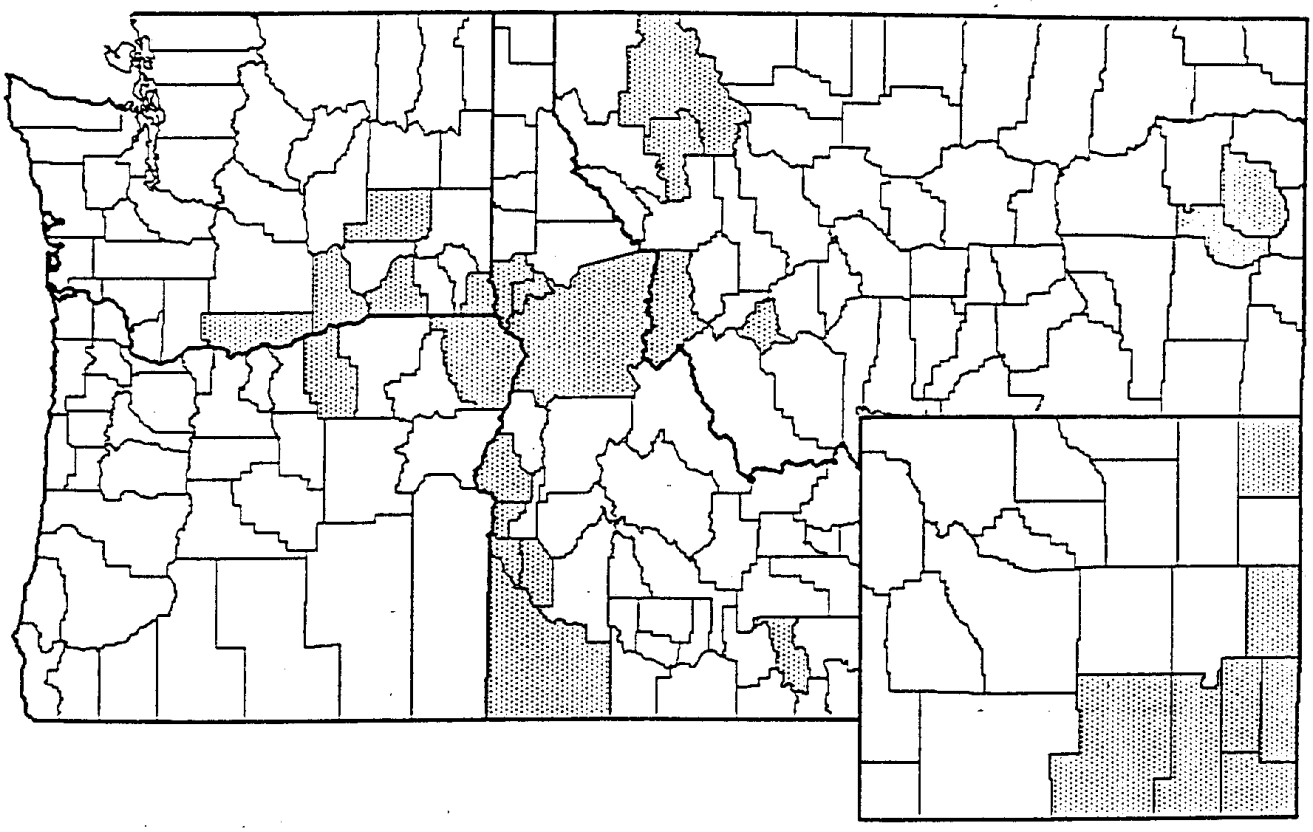
(REL 6.2) COUNTIES REPORTING CARTHAMUS BAETICUS (), 1875-1995.



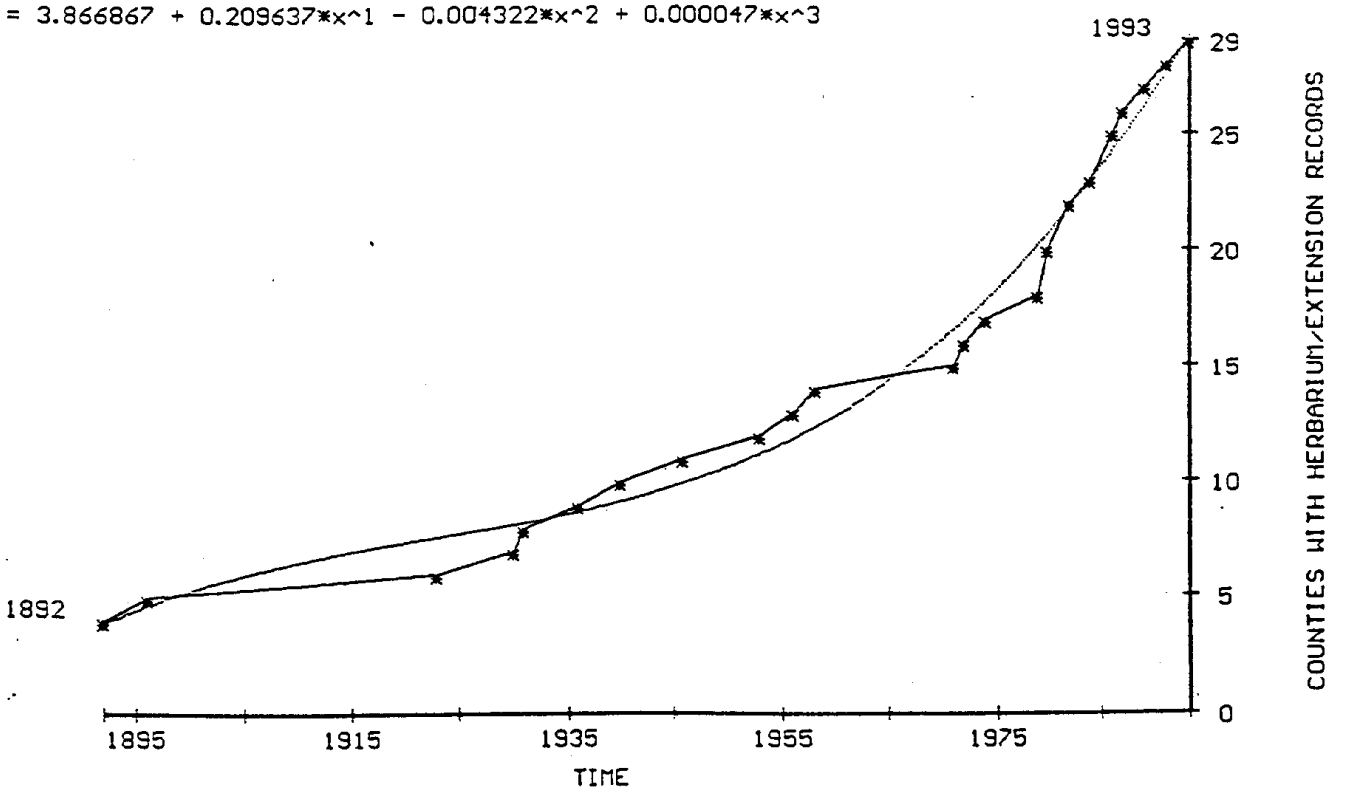
CARTHAMUS BAETICUS INCREASE IN NORTHWEST STATES



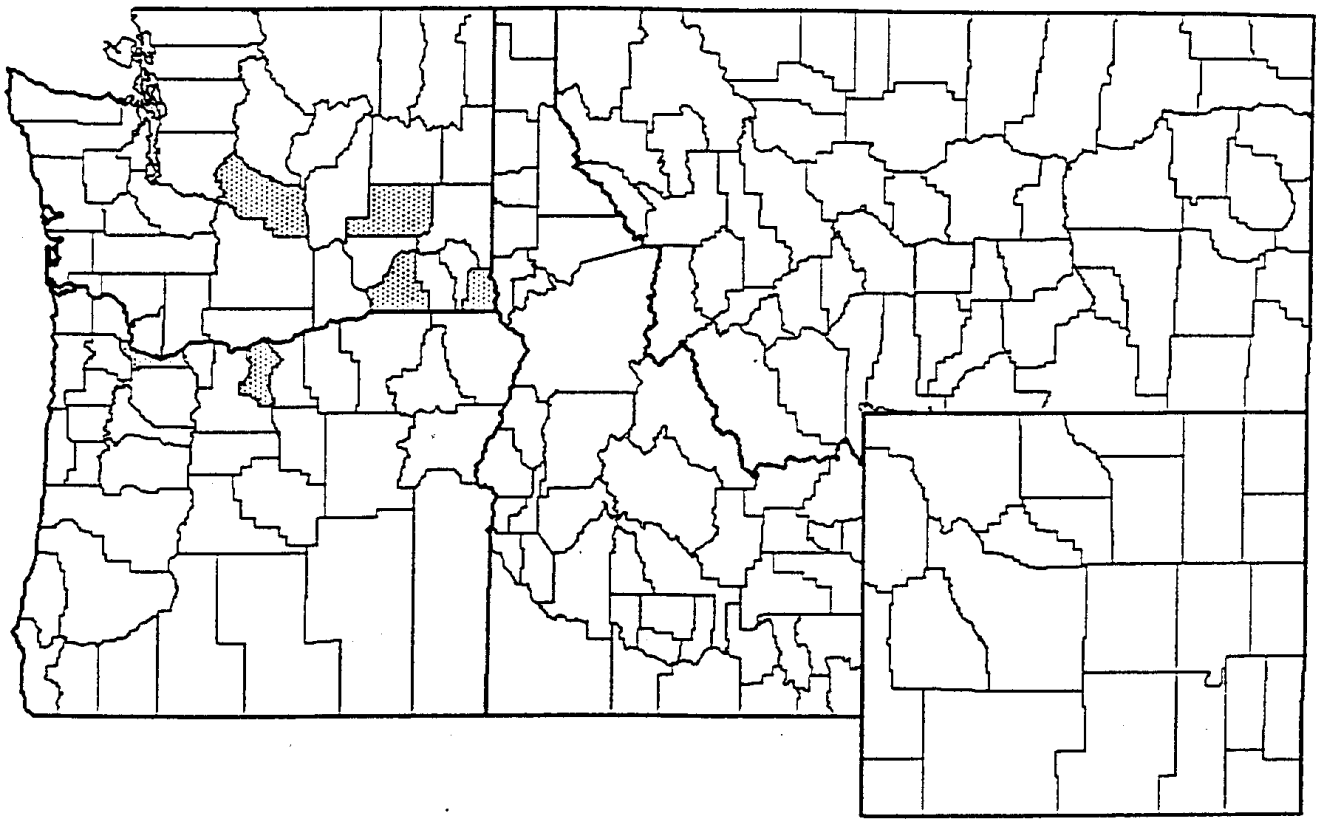
(REL 6.2) COUNTIES REPORTING CENCHRUS LONGISPINUS (LONGSPINE SANDBUR), 1875-1995.



CENCHRUS LONGISPINUS INCREASE IN NORTHWEST STATES
y = 3.866867 + 0.209637*x^1 - 0.004322*x^2 + 0.000047*x^3

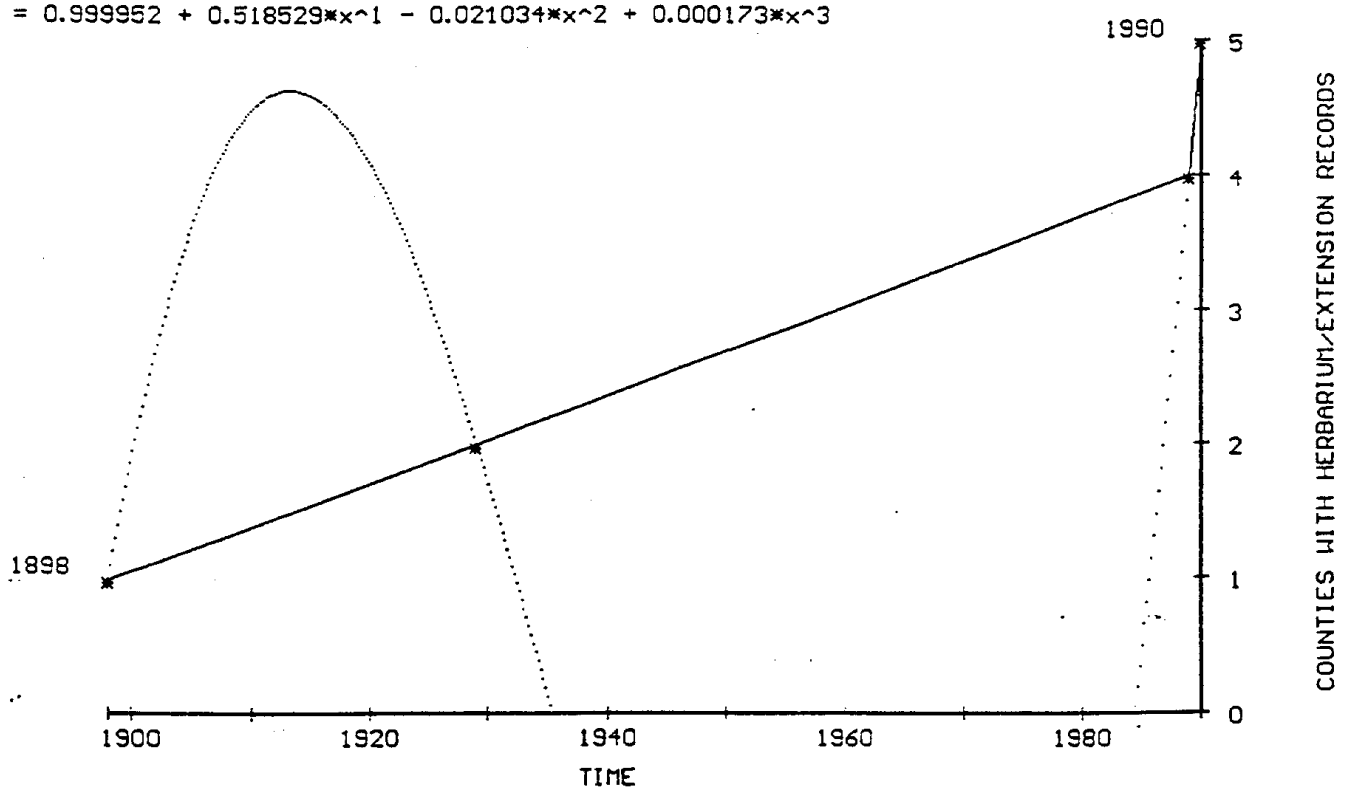


(REL 6.2) COUNTIES REPORTING CENTAUREA CALCITRAPA (PURPLE STARTHISTLE), 1875-1995.

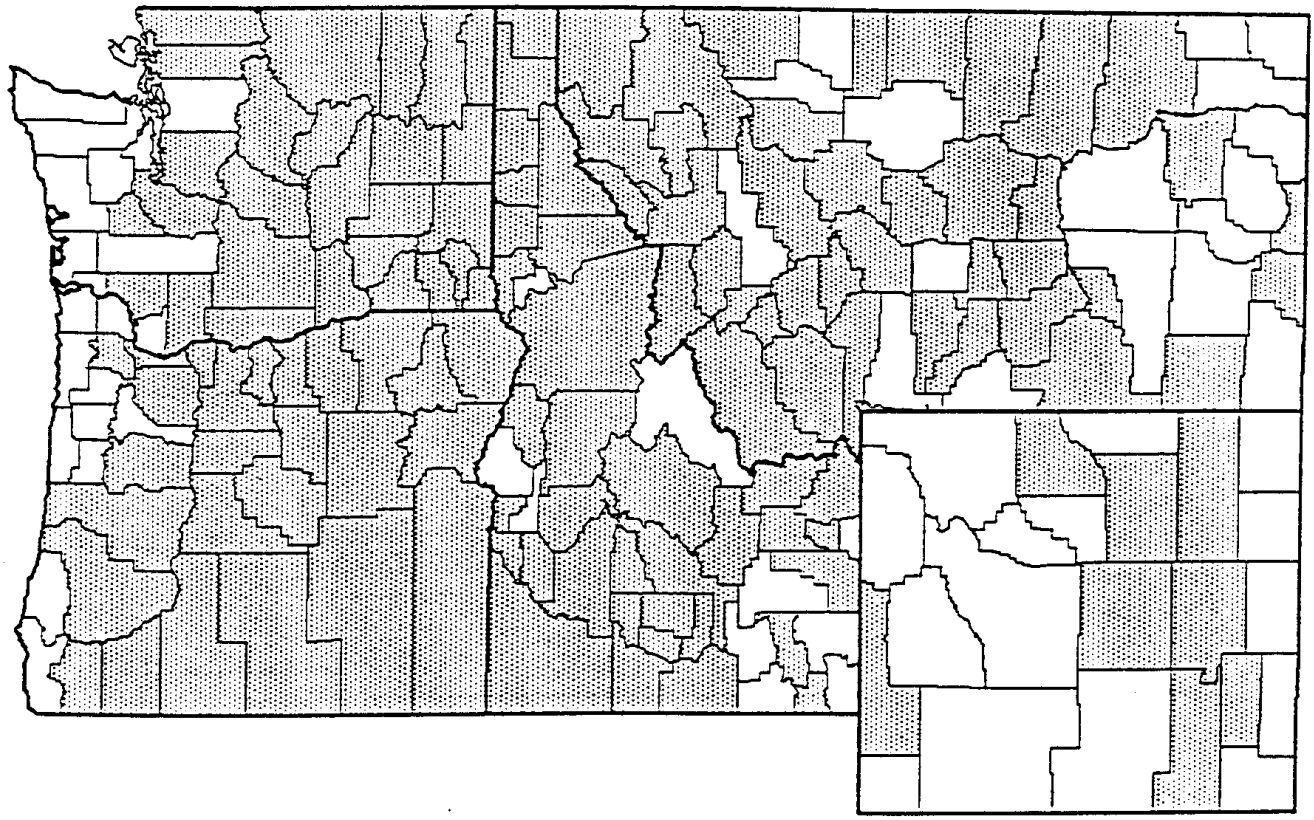


CENTAUREA CALCITRAPA INCREASE IN NORTHWEST STATES

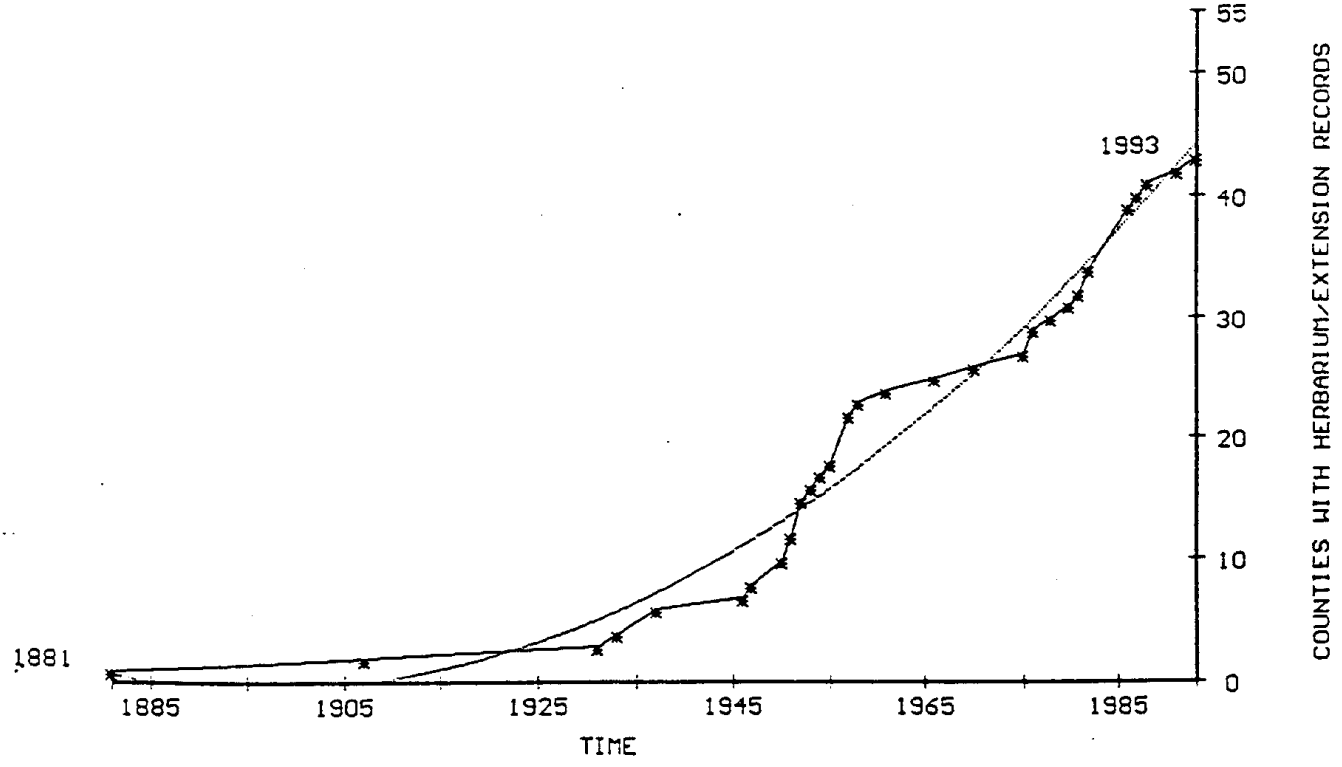
y = 0.999952 + 0.518529*x^1 - 0.021034*x^2 + 0.000173*x^3



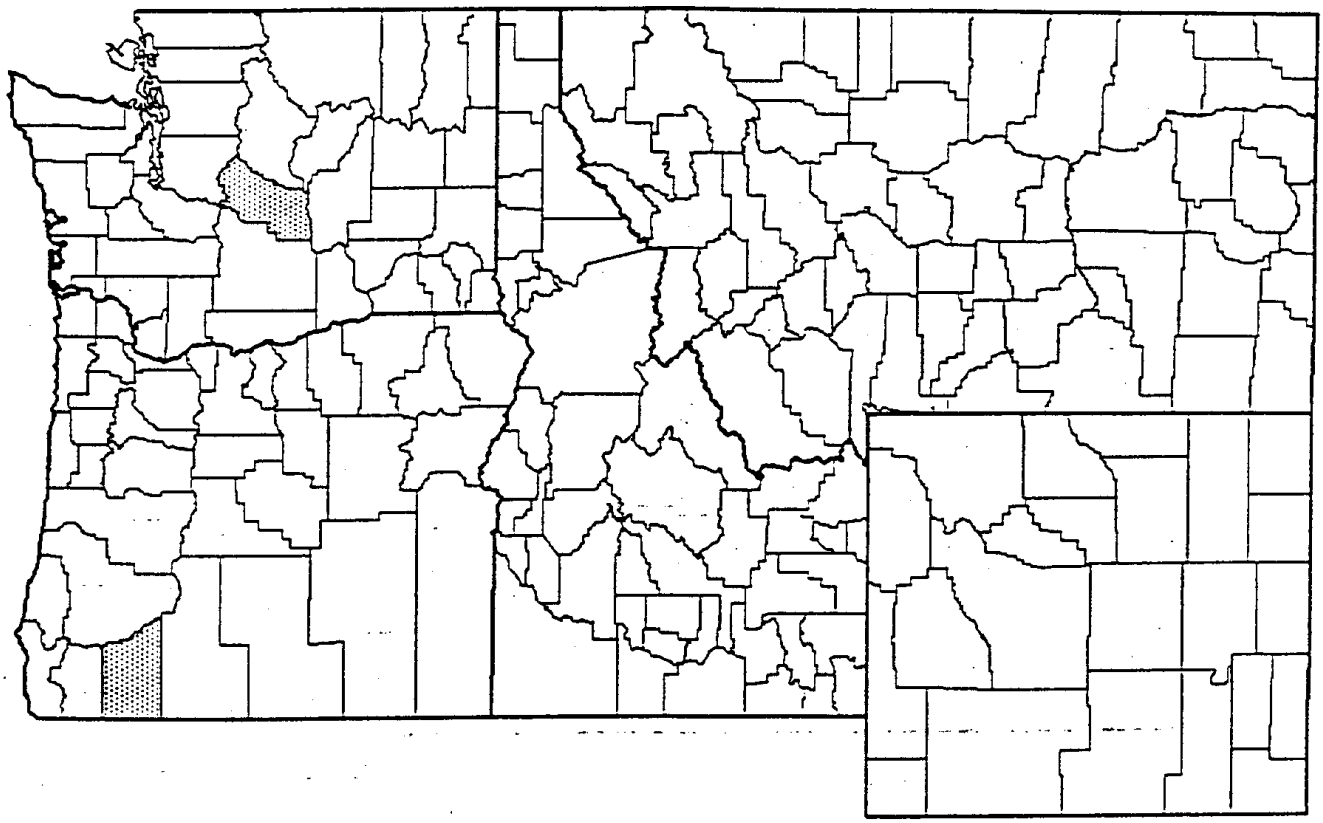
(REL 6.2) COUNTIES REPORTING CENTAUREA DIFFUSA (DIFFUSE KNAPWEED), 1875-1995.



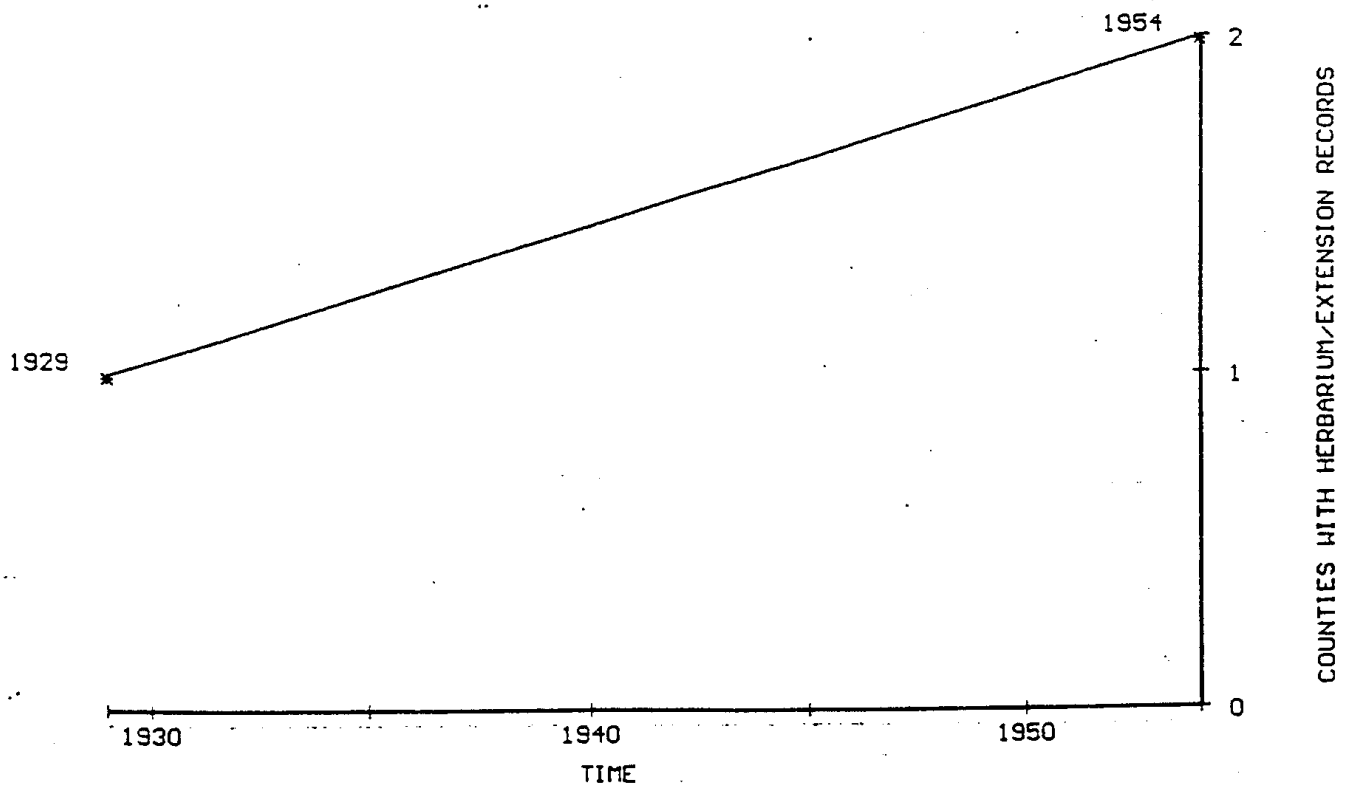
CENTAUREA DIFFUSA INCREASE IN NORTHWEST STATES
y = 0.641502 - 0.150203*x^1 + 0.004820*x^2



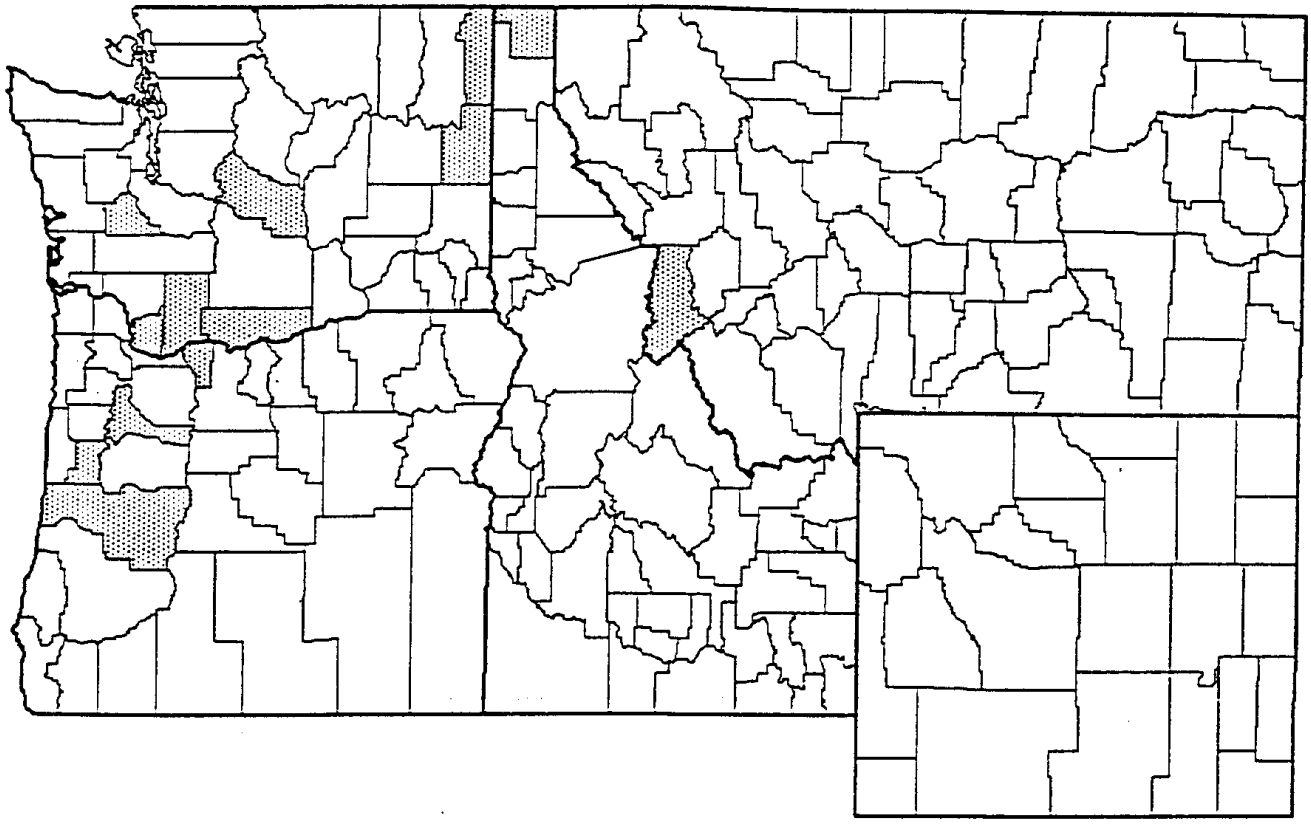
(REL 6.2) COUNTIES REPORTING CENTAUREA IBERICA (IBERIAN STARTHISTLE), 1875-1995.



CENTAUREA IBERICA INCREASE IN NORTHWEST STATES

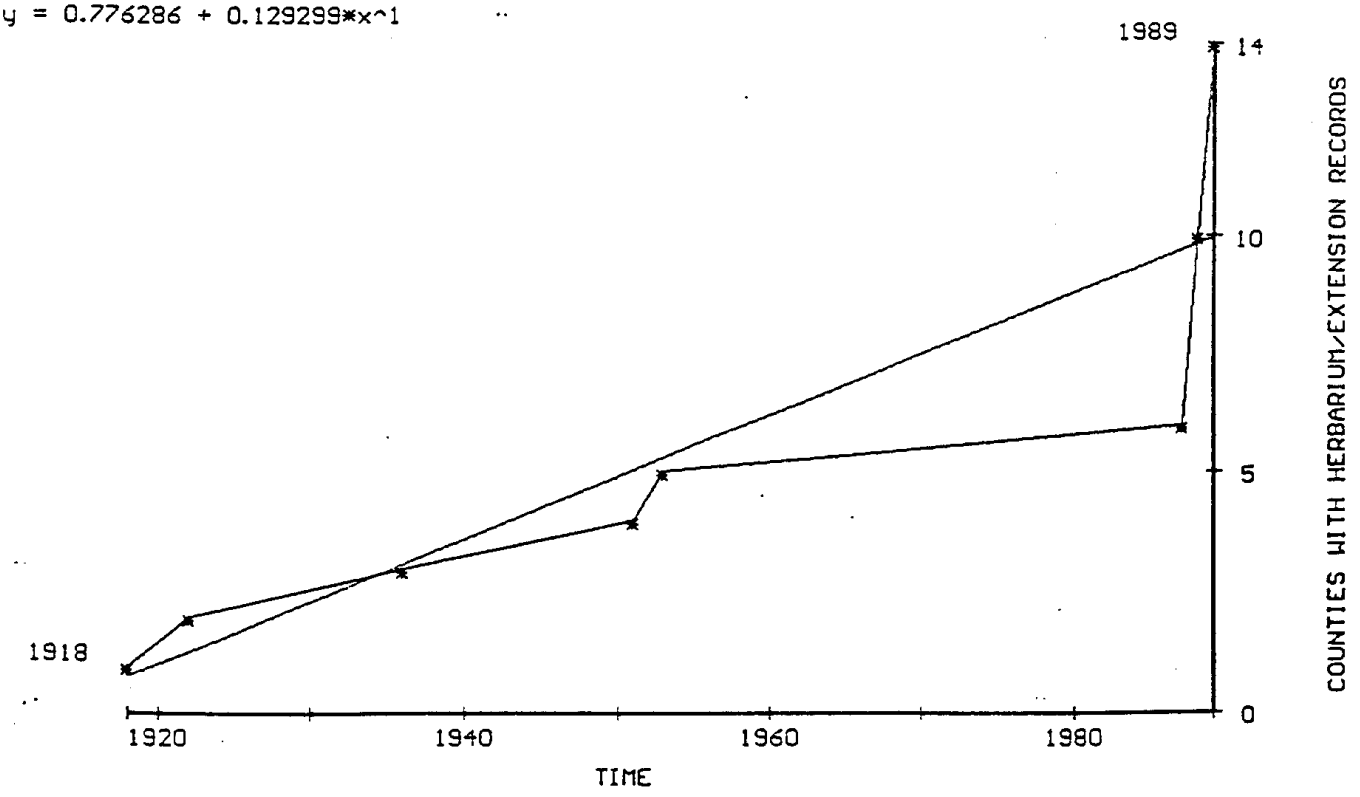


(REL 6.2) COUNTIES REPORTING CENTAUREA JUNCEA X NIGRA (KNAPWEED), 1875-1995.

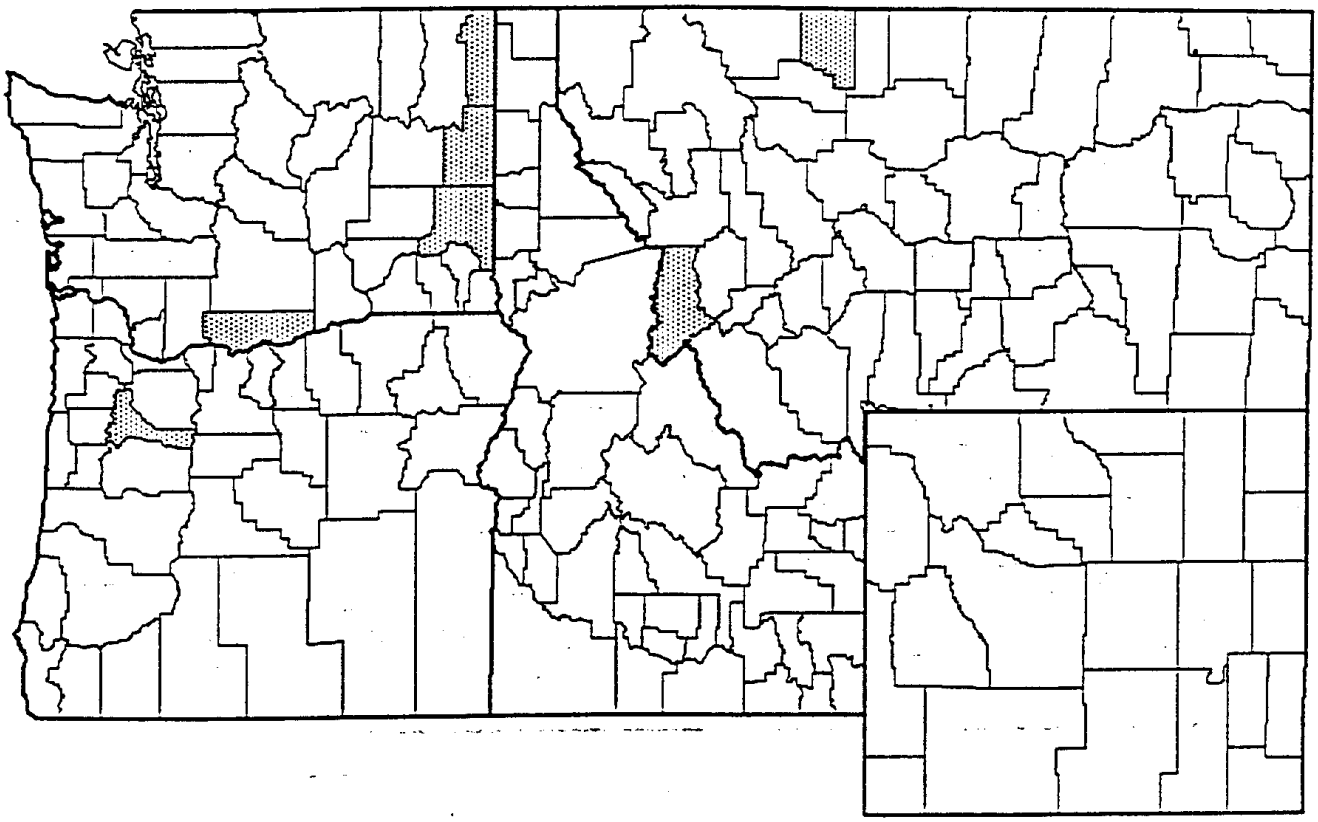


CENTAUREA JUNCEA X NIGRA INCREASE IN NORTHWEST STATES

y = 0.776286 + 0.129299*x^1

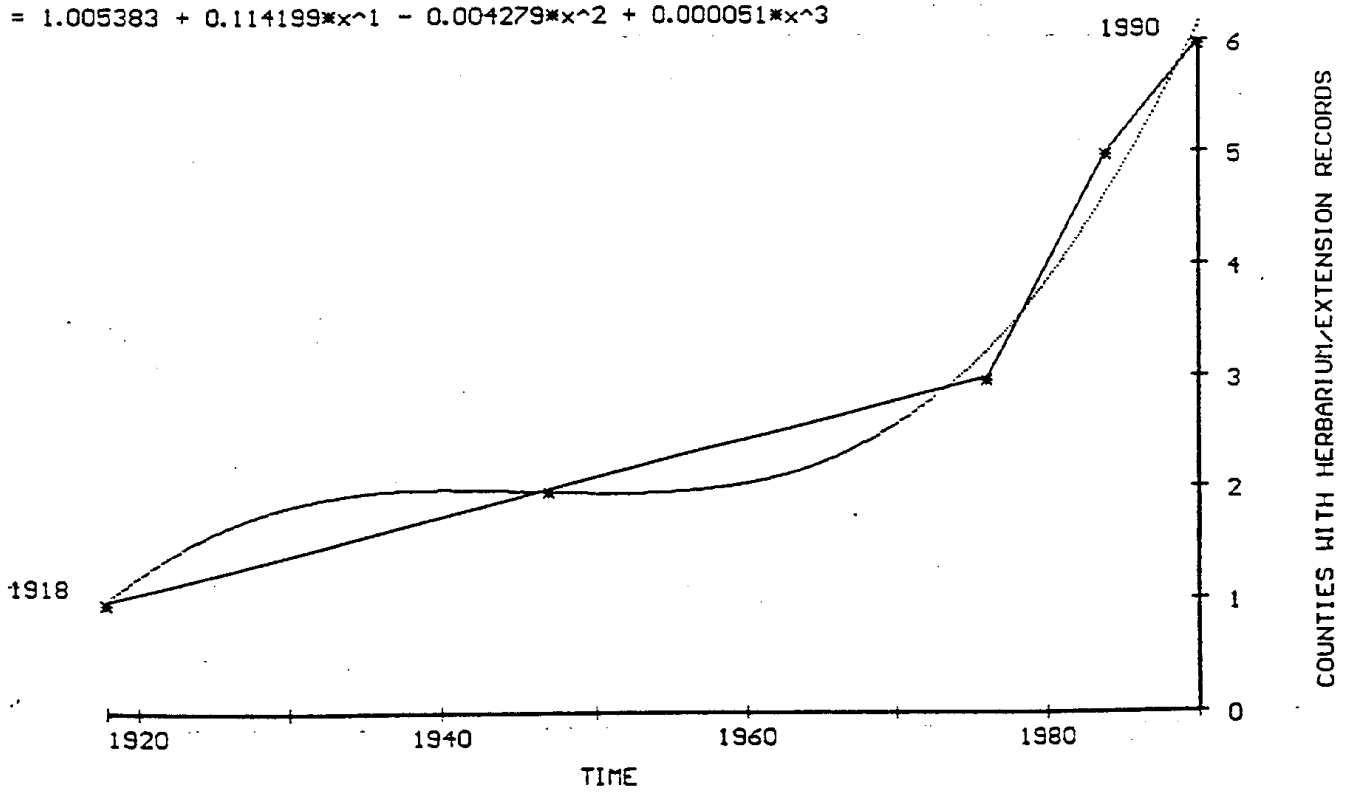


(REL 6.2) COUNTIES REPORTING CENTAUREA MACROCEPHALA (BIGHEAD KNAPWEED), 1875-1995.

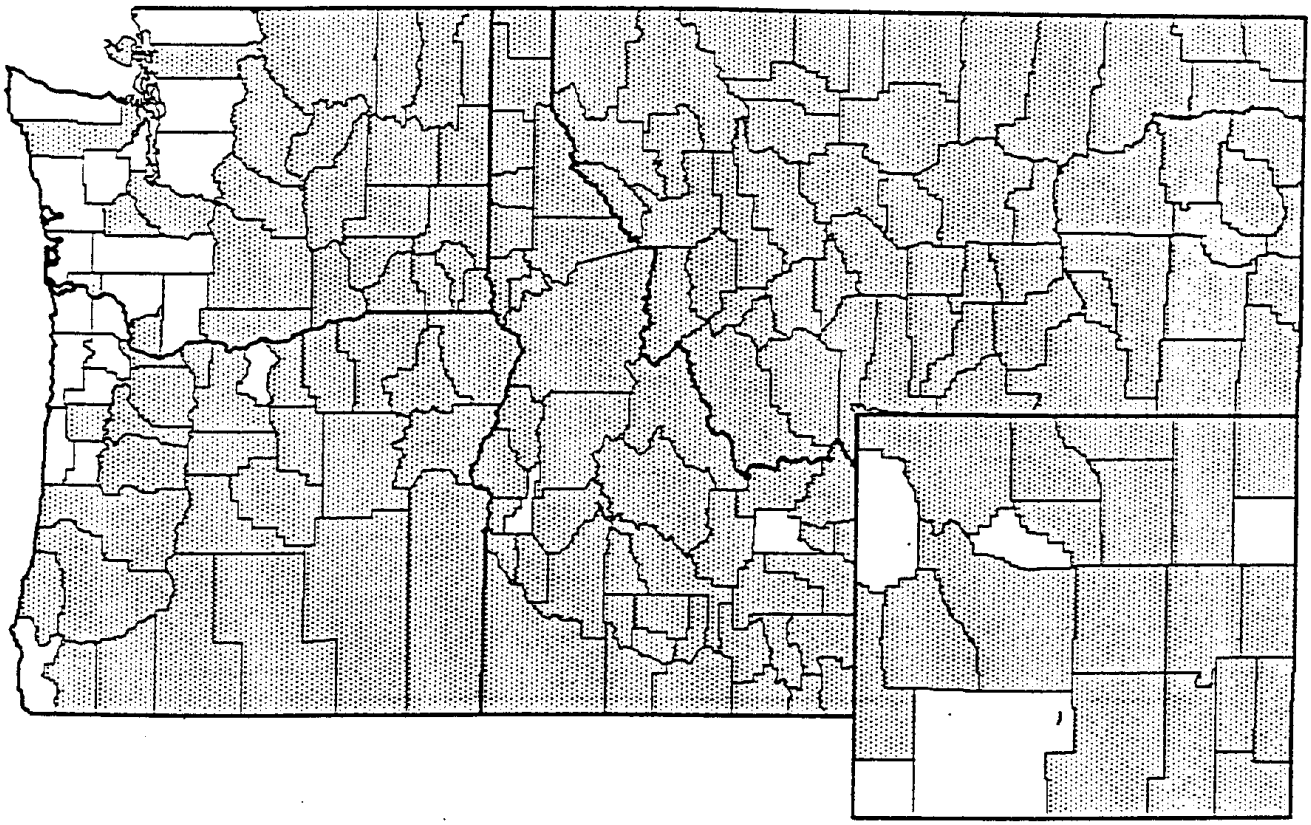


CENTAUREA MACROCEPHALA INCREASE IN NORTHWEST STATES

y = 1.005383 + 0.114199*x^1 - 0.004279*x^2 + 0.000051*x^3

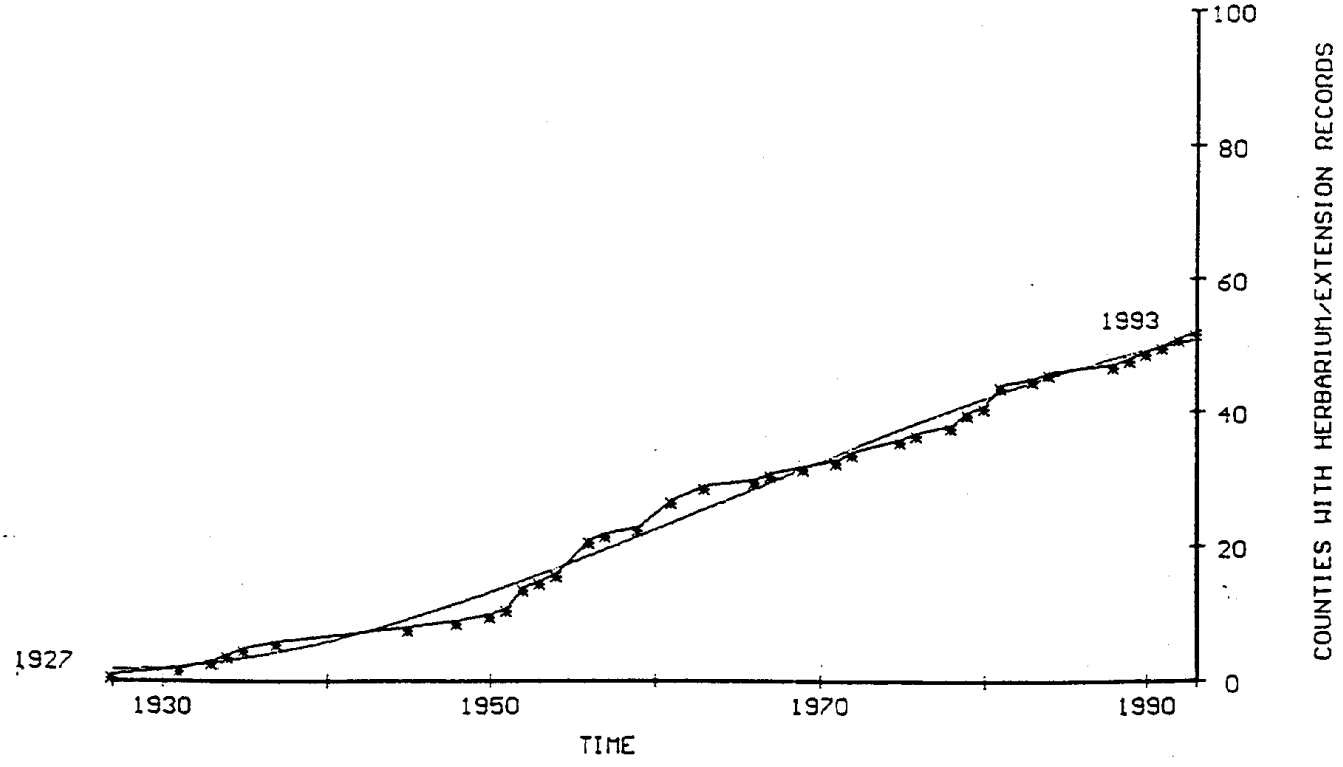


(REL 6.2) COUNTIES REPORTING CENTAUREA MACULOSA (SPOTTED KNAPWEED), 1875-1995.

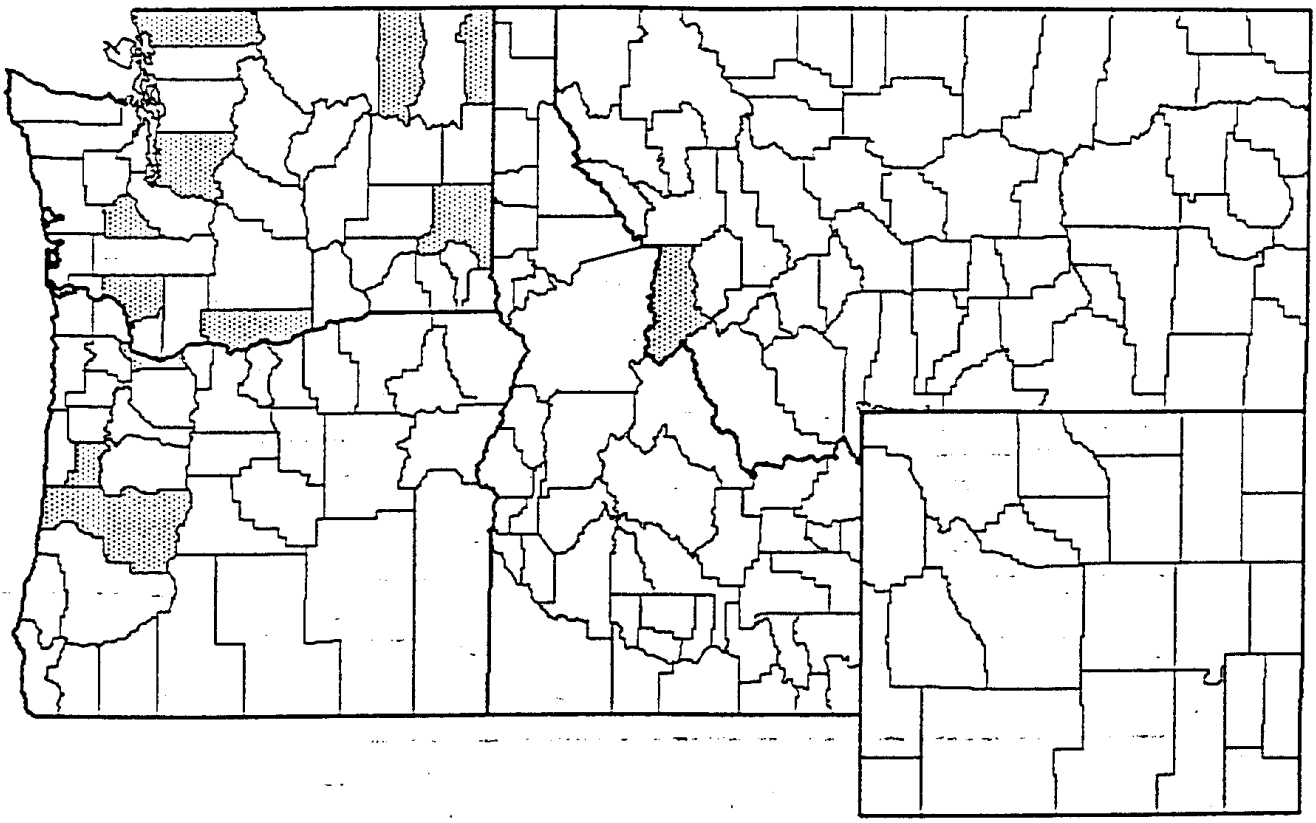


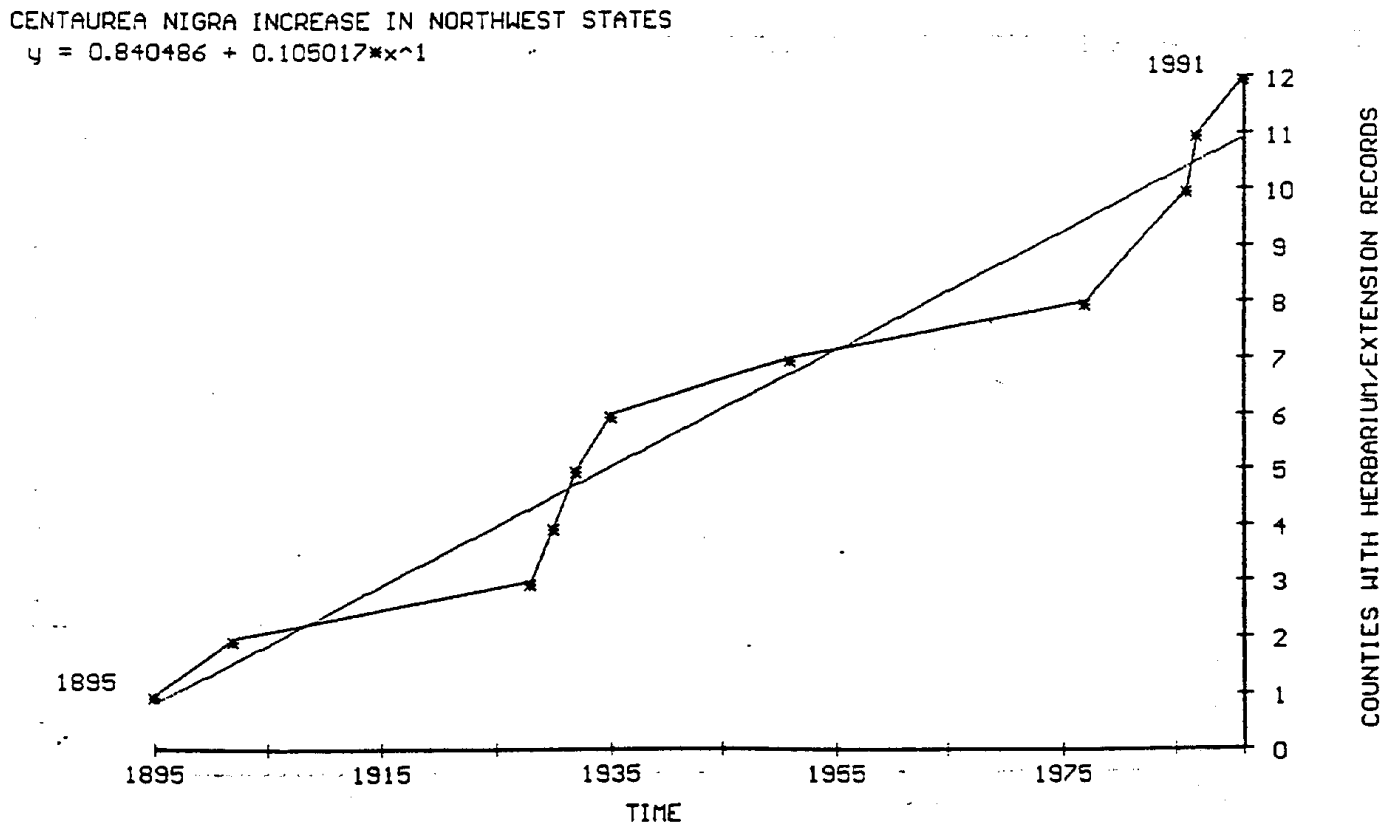
CENTAUREA MACULOSA INCREASE IN NORTHWEST STATES

y = 1.749160 + 0.020801*x^1 + 0.026163*x^2 - 0.000231*x^3

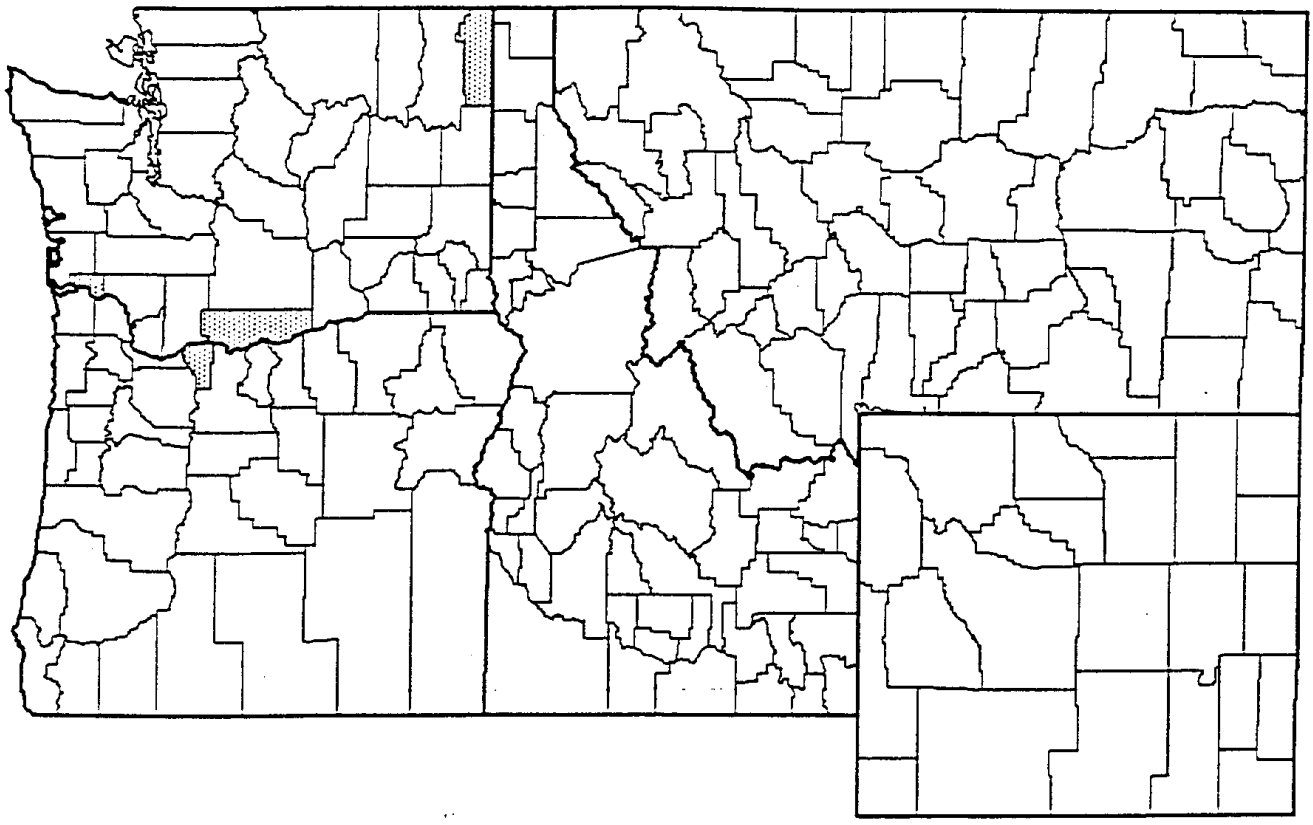


(REL 6.2) COUNTIES REPORTING CENTAUREA NIGRA (BLACK KNAPWEED), 1875-1995.

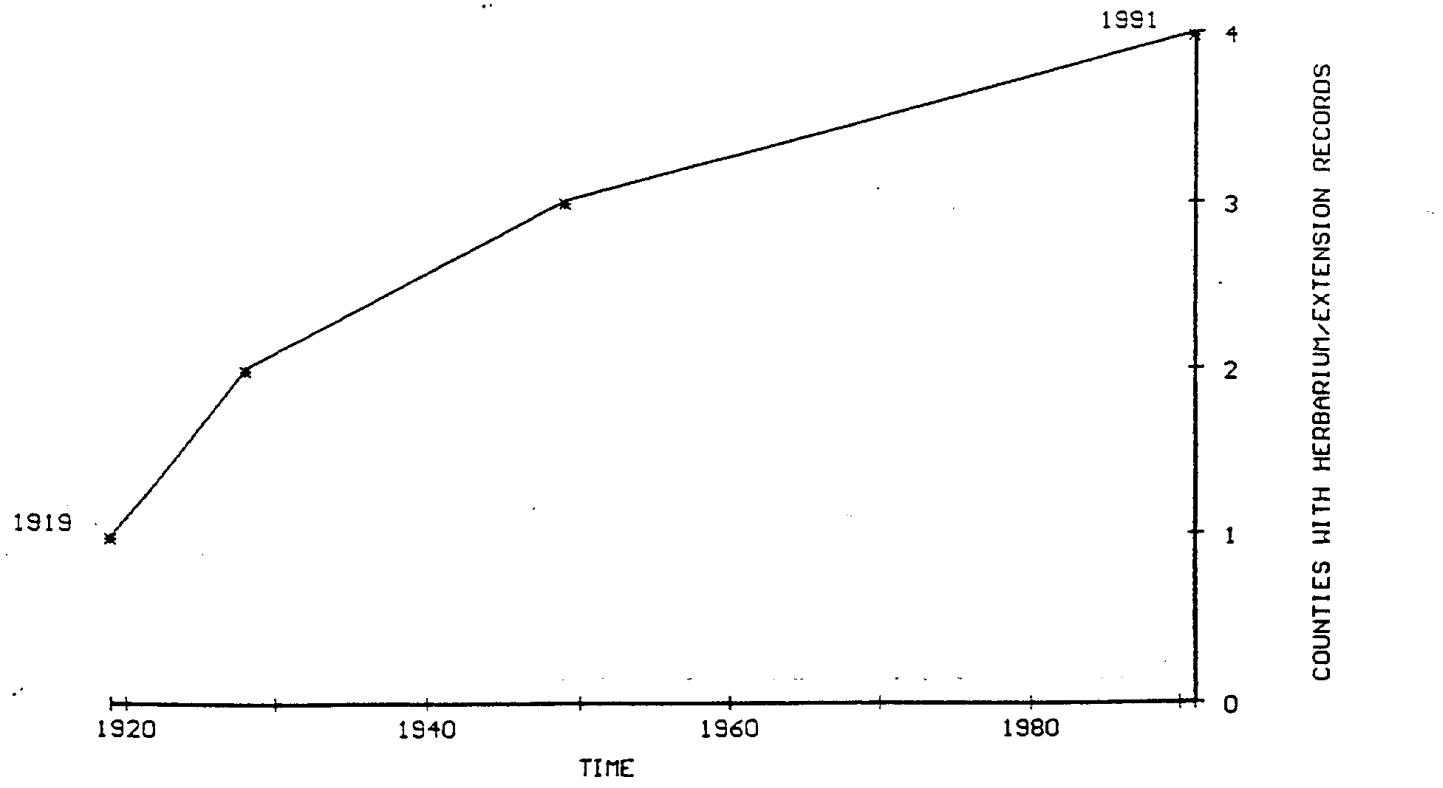




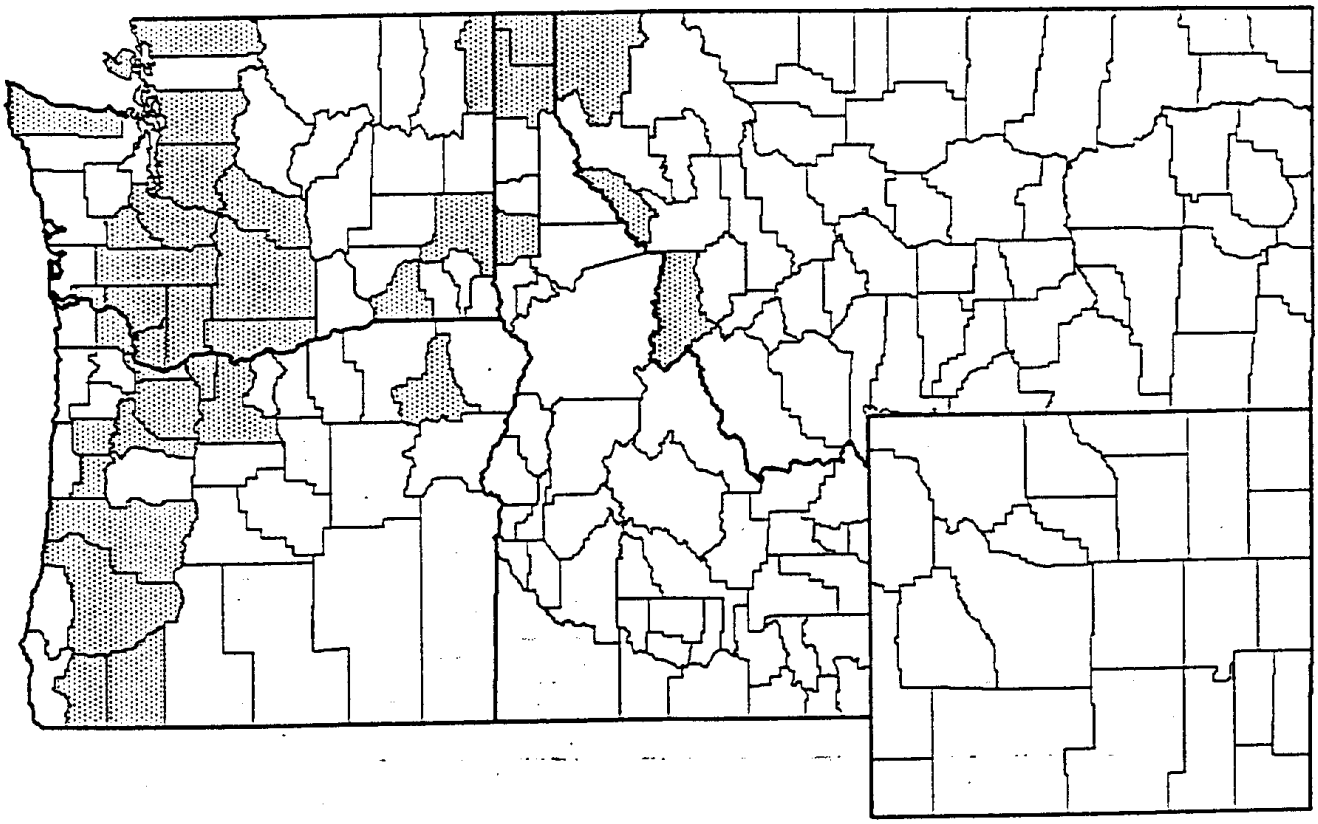
(REL 6.2) COUNTIES REPORTING CENTAUREA NIGRESCENS (KNAPWEED), 1875-1995.



CENTAUREA NIGRESCENS INCREASE IN NORTHWEST STATES

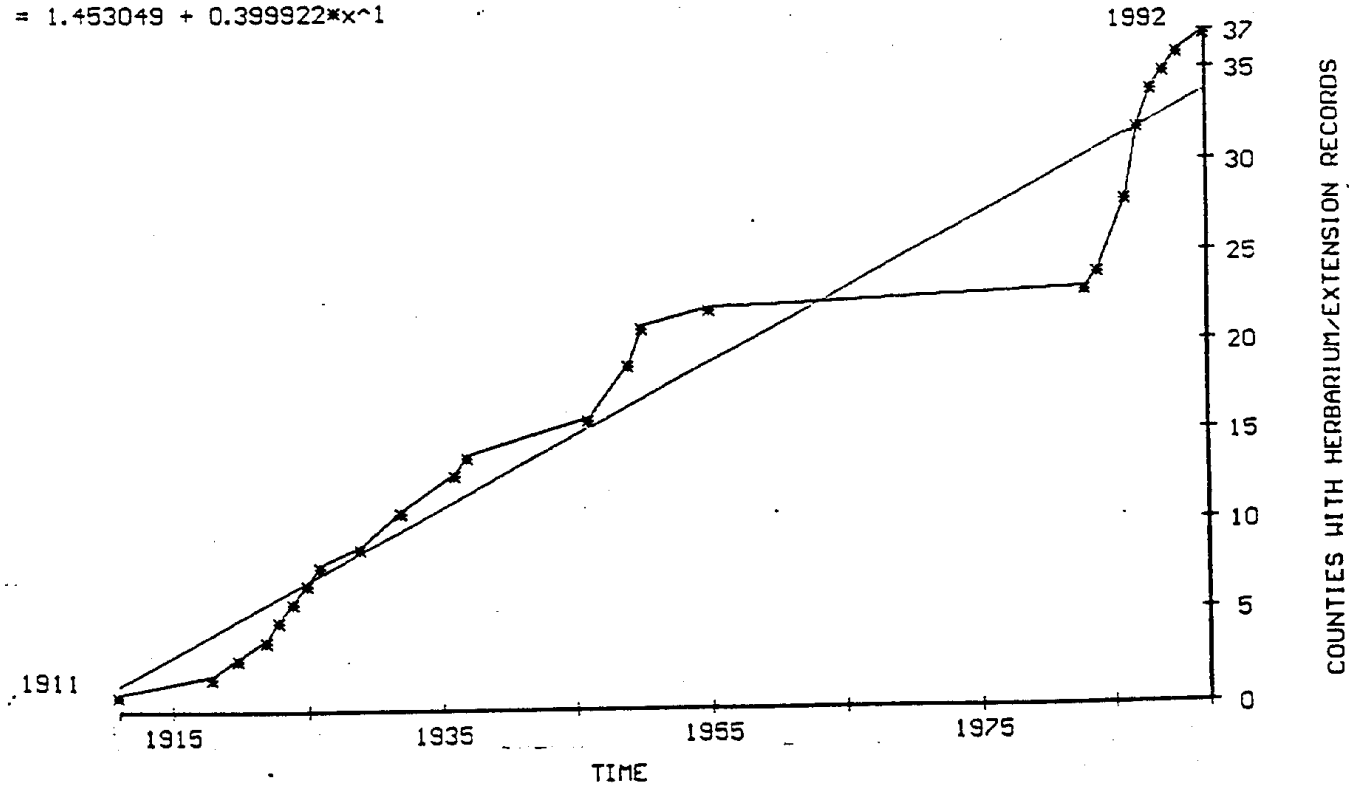


(REL 6.2) COUNTIES REPORTING CENTAUREA PRATENSIS (MEADOW KNAPWEED), 1875-1995.

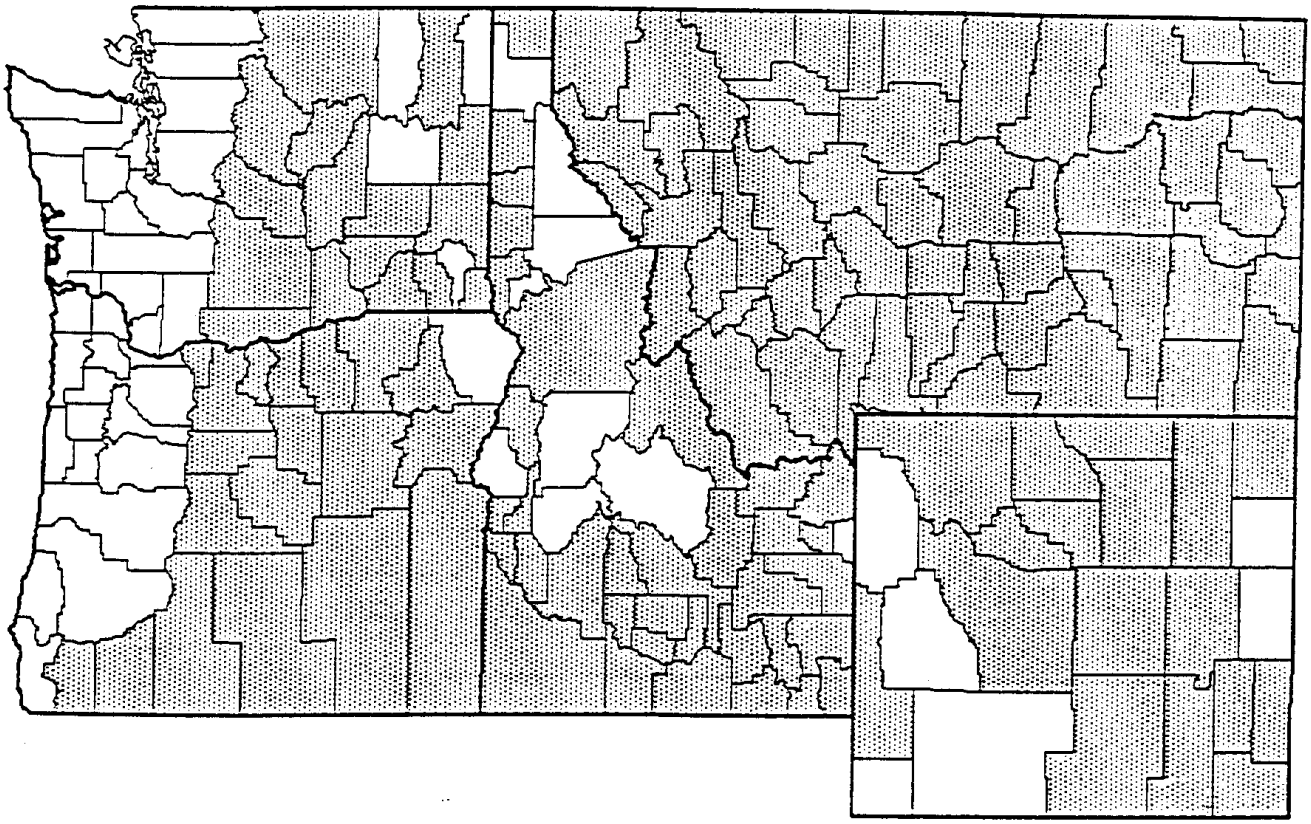


CENTAUREA PRATENSIS INCREASE IN NORTHWEST STATES

y = 1.453049 + 0.399922*x^1

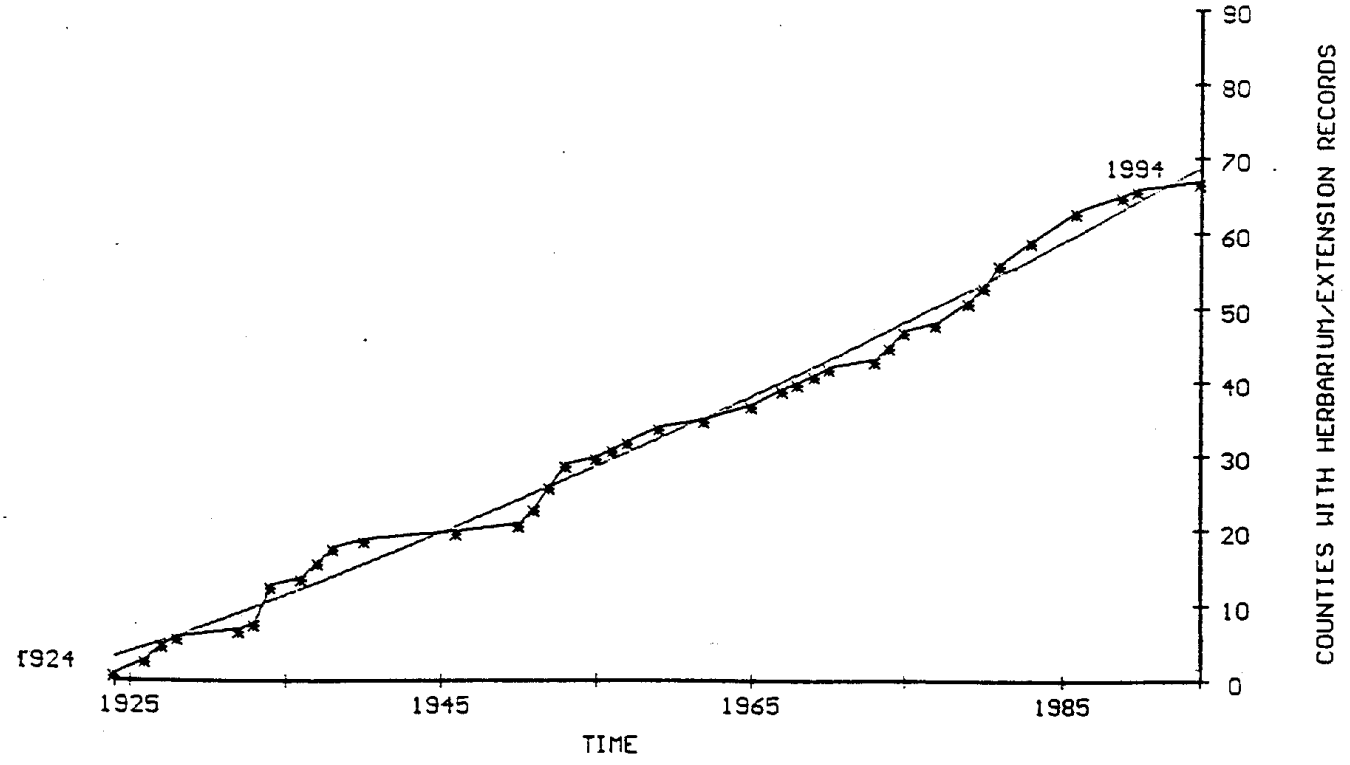


(REL 6.2) COUNTIES REPORTING CENTAUREA REPENS (RUSSIAN KNAPWEED), 1875-1995.

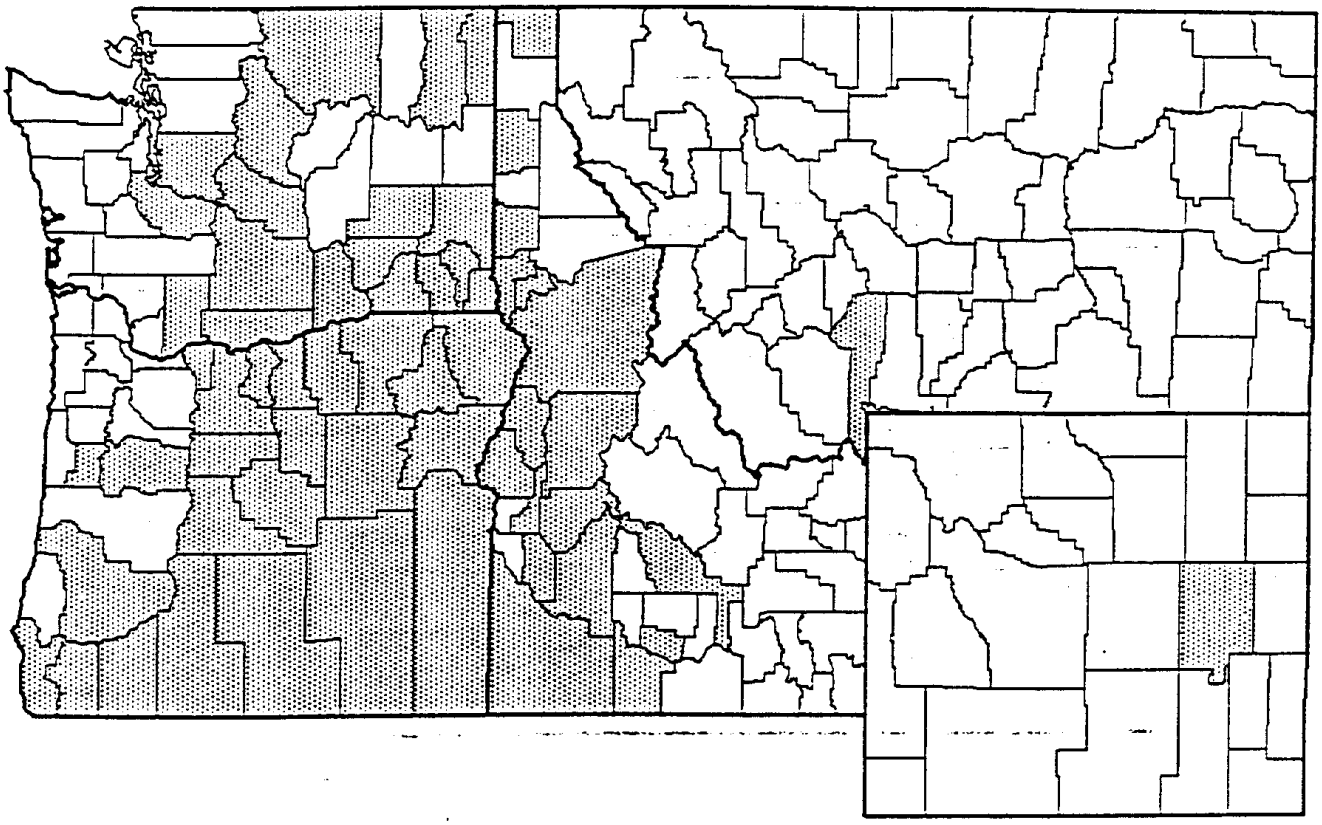


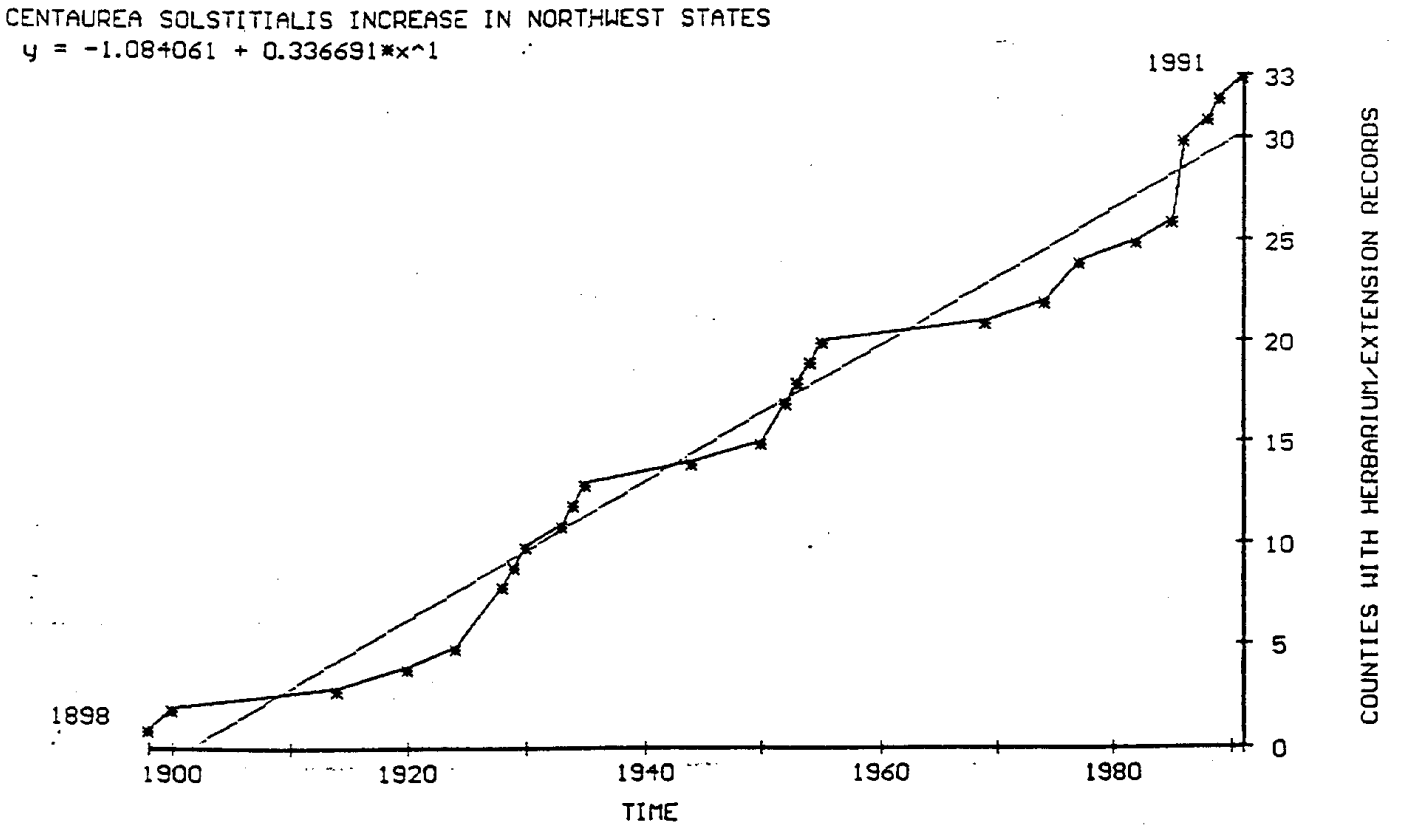
CENTAUREA REPENS INCREASE IN NORTHWEST STATES

y = 3.245207 + 0.727114*x^1 + 0.003004*x^2

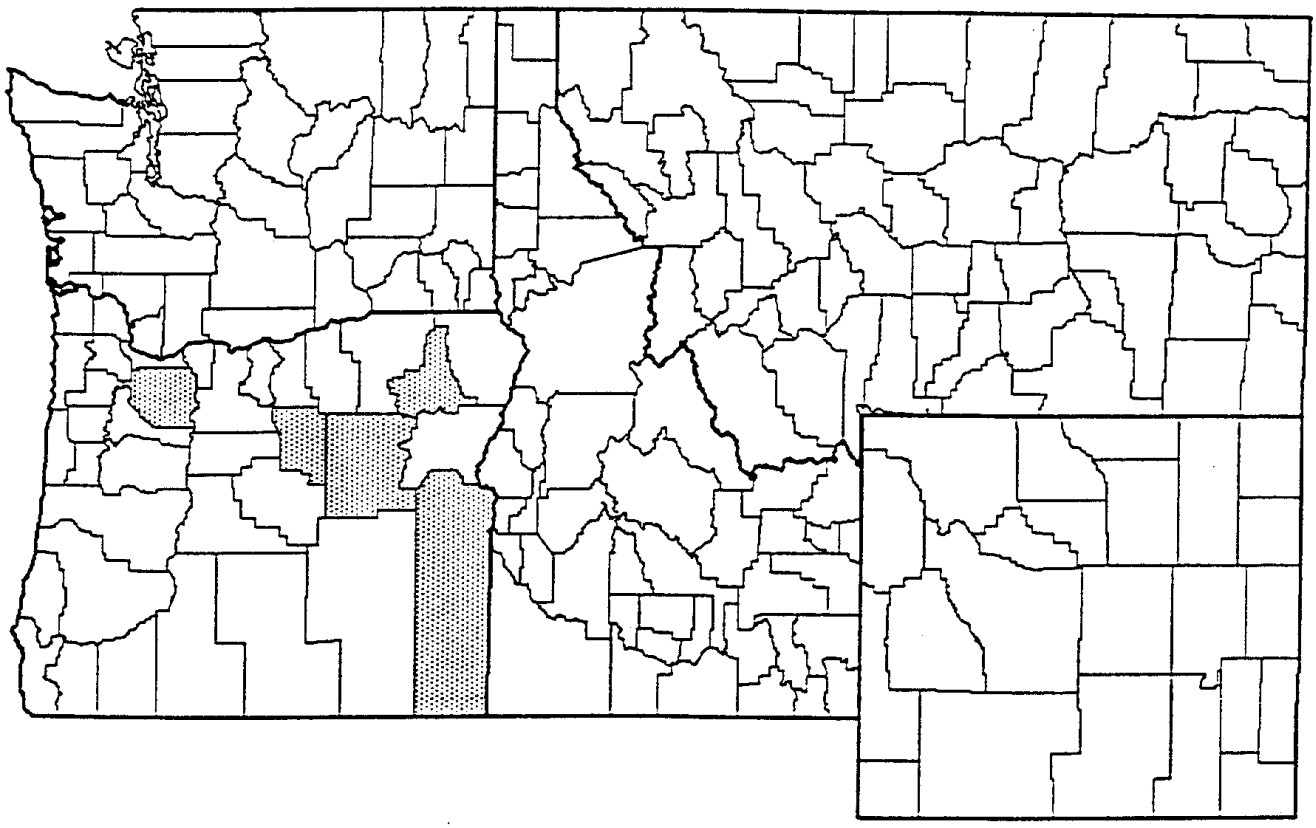


(REL 6.2) COUNTIES REPORTING CENTAUREA SOLSTITIALIS (YELLOW STARTHISTLE), 1875-1995.

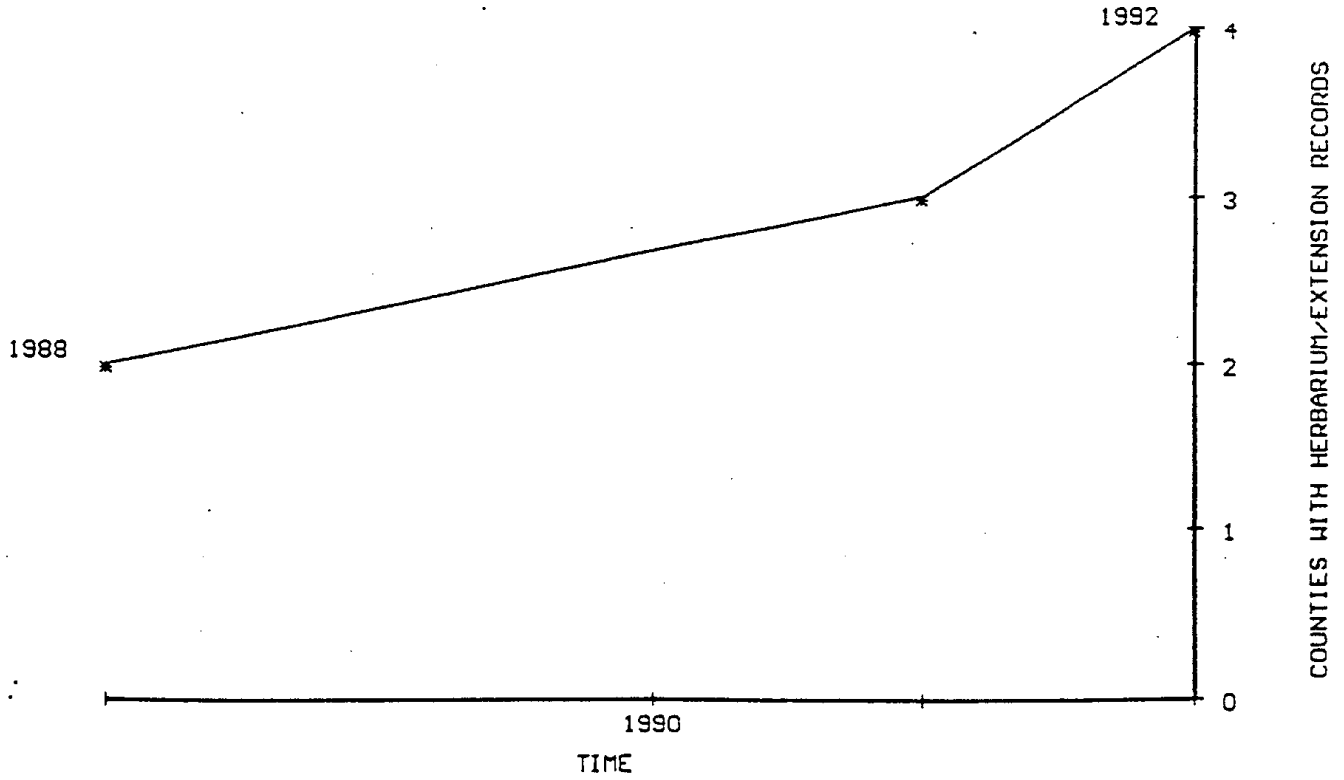




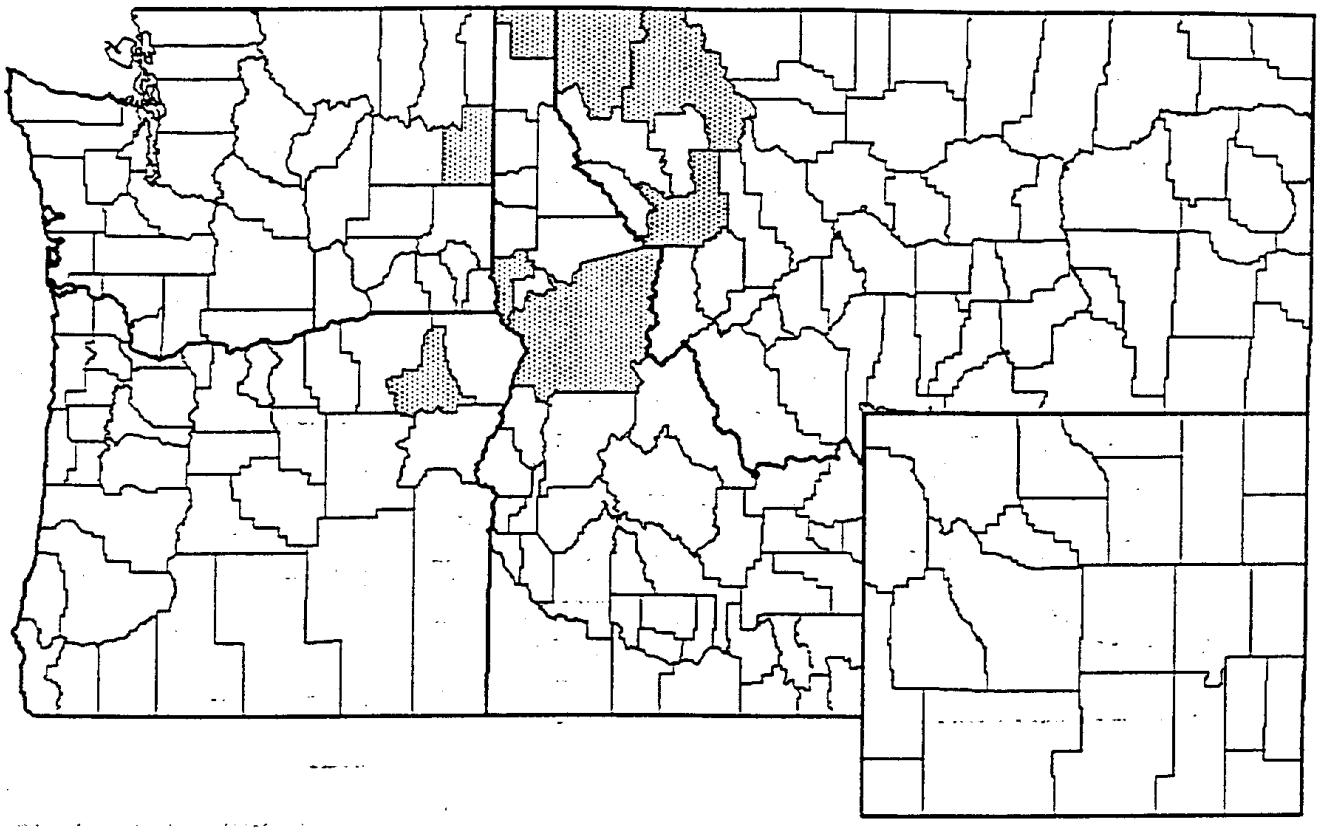
(REL 6.2) COUNTIES REPORTING CENTAUREA VIRGATA (SQUARROSE KNAPWEED), 1875-1995.



CENTAUREA VIRGATA INCREASE IN NORTHWEST STATES

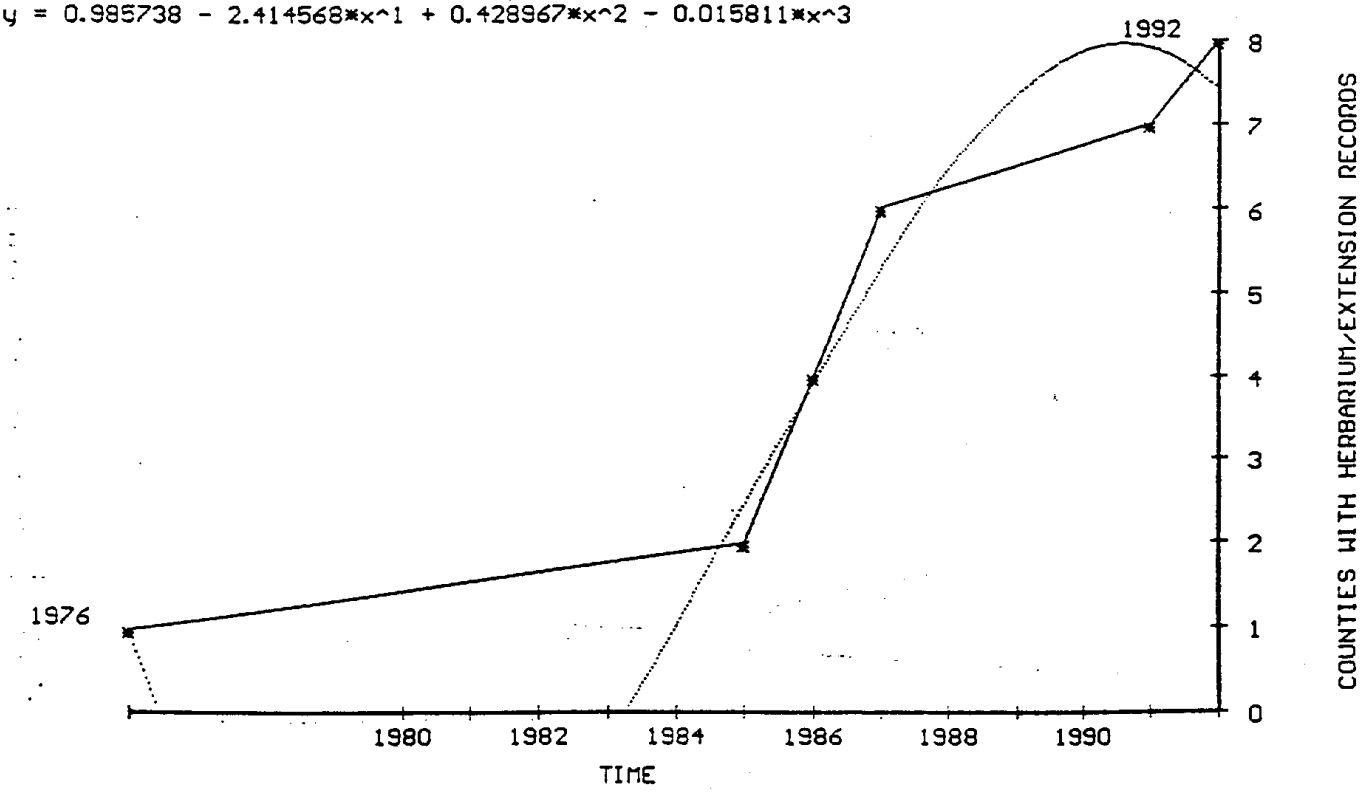


(REL 6.2) COUNTIES REPORTING CHAENORRHINUM MINUS (DWARF SNAPDRAGON), 1875-1995.

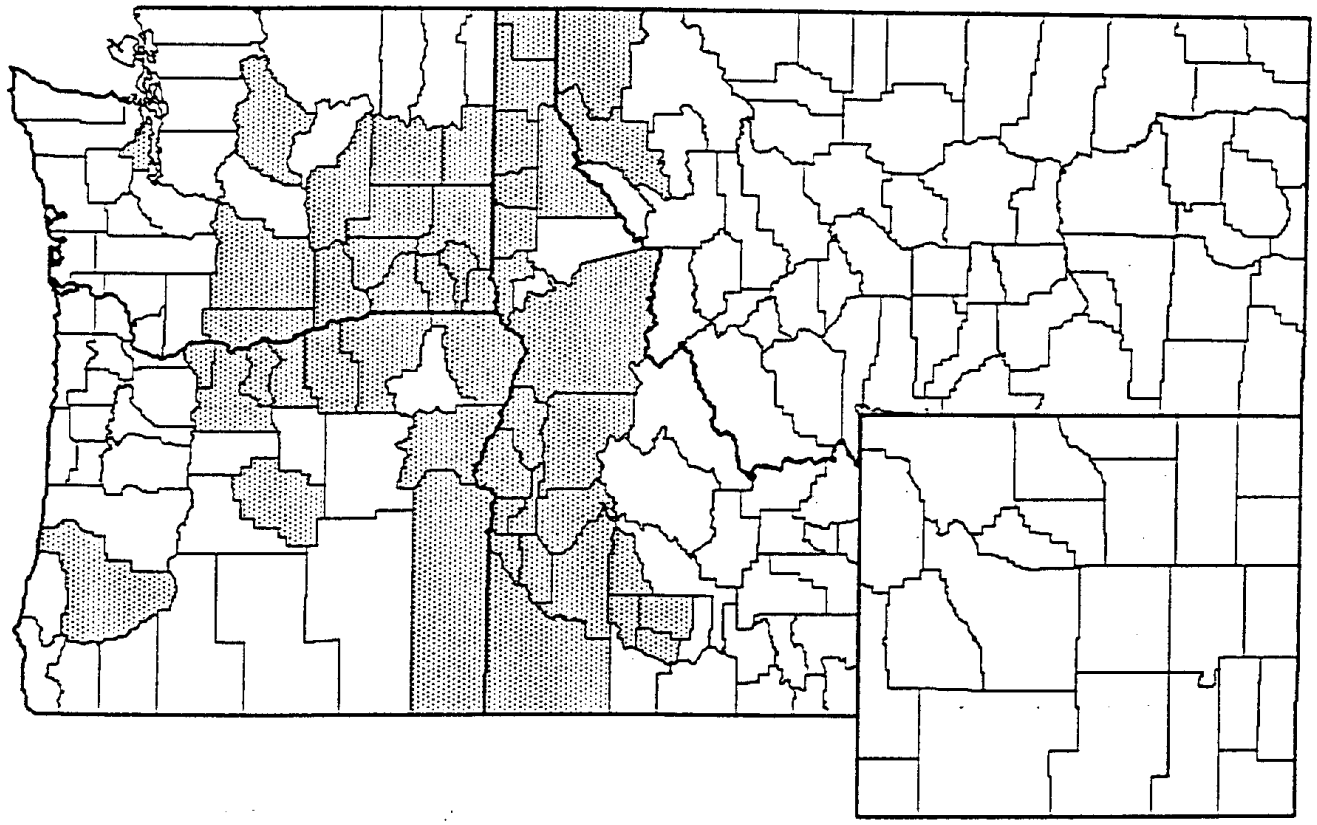


CHAENORRHINUM MINUS INCREASE IN NORTHWEST STATES

y = 0.985738 - 2.414568*x^1 + 0.428967*x^2 - 0.015811*x^3

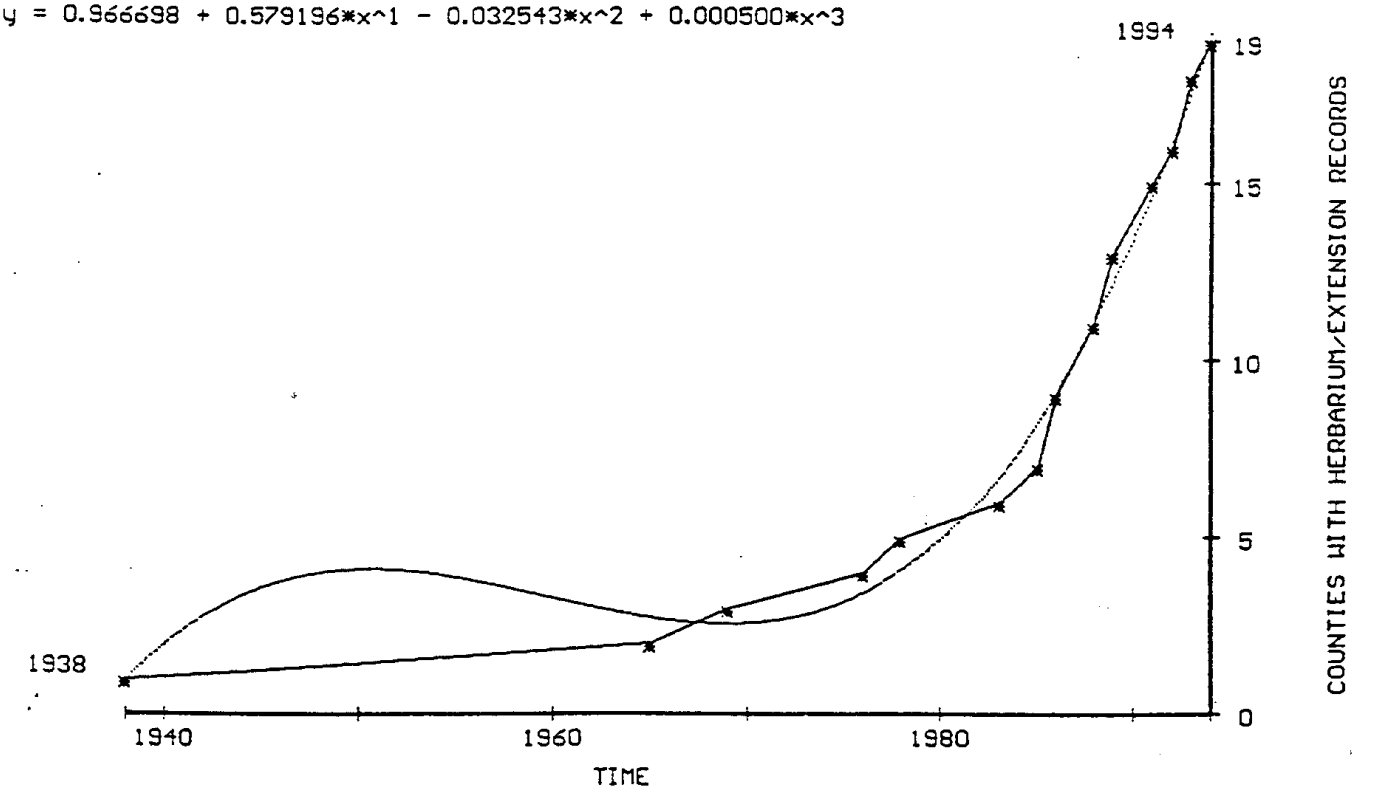


(REL 6.2) COUNTIES REPORTING CHONDRILLA JUNCEA (RUSH SKELETONWEED), 1875-1995.

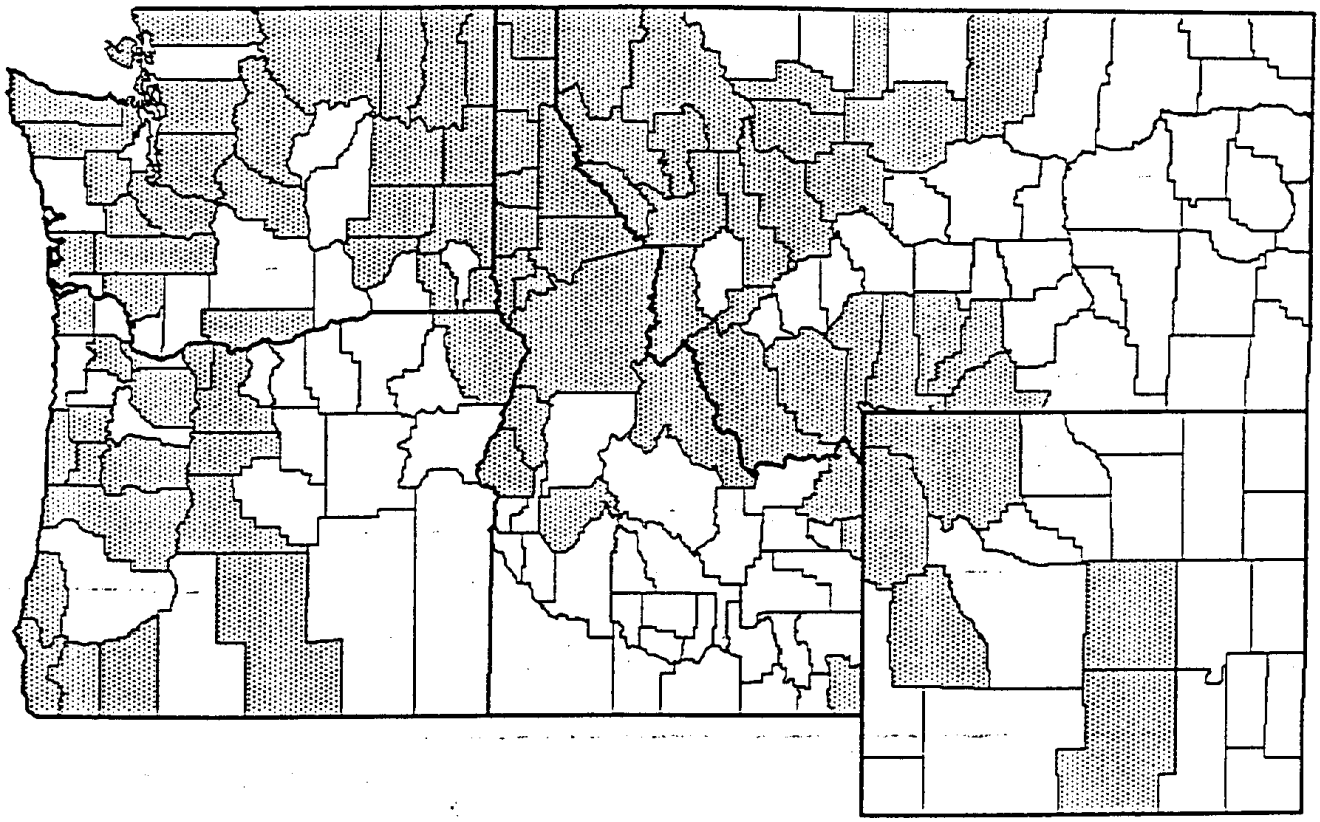


CHONDRILLA JUNCEA INCREASE IN NORTHWEST STATES

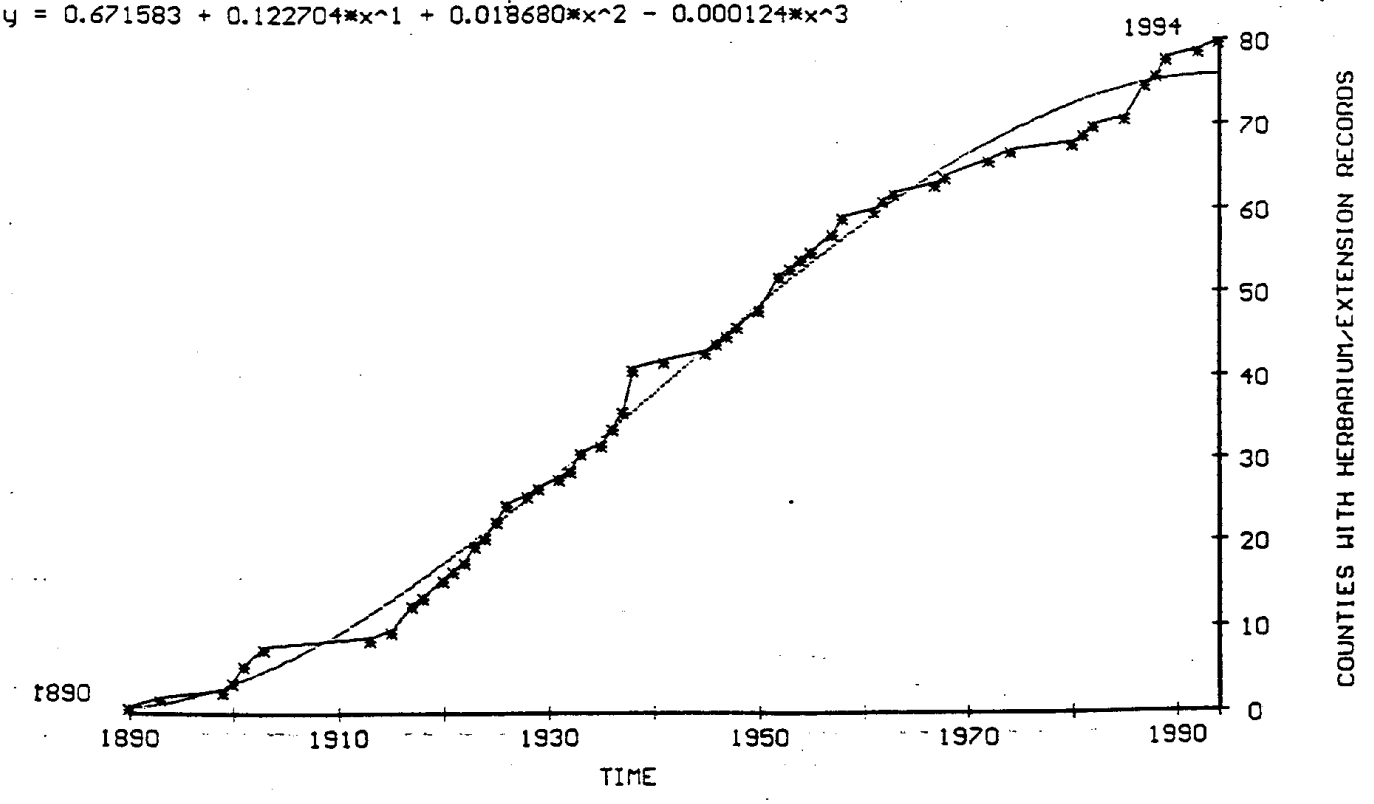
y = 0.966698 + 0.579196*x^1 - 0.032543*x^2 + 0.000500*x^3



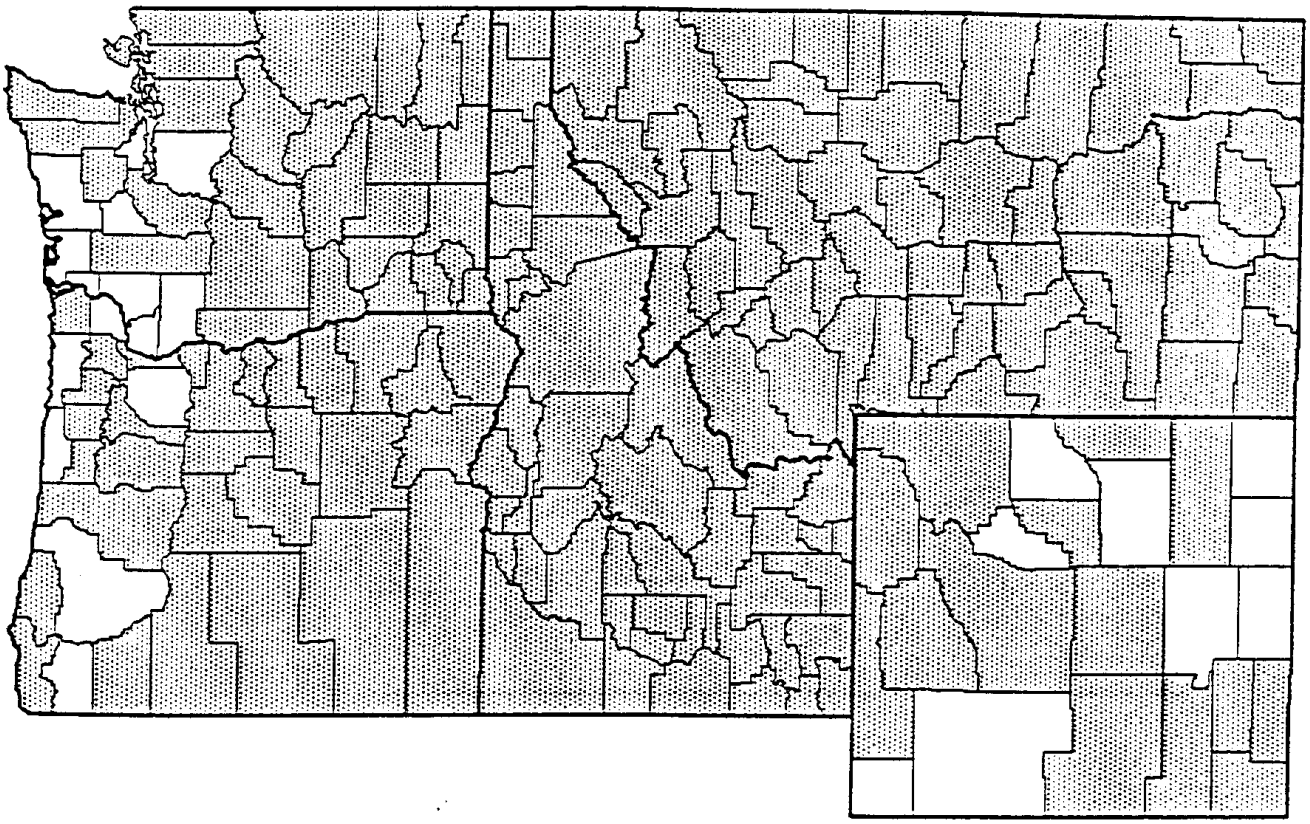
(REL 6.2) COUNTIES REPORTING CHRYSANTHEMUM LEUCANTHEMUM (OXEYE DAISY), 1875-1995.



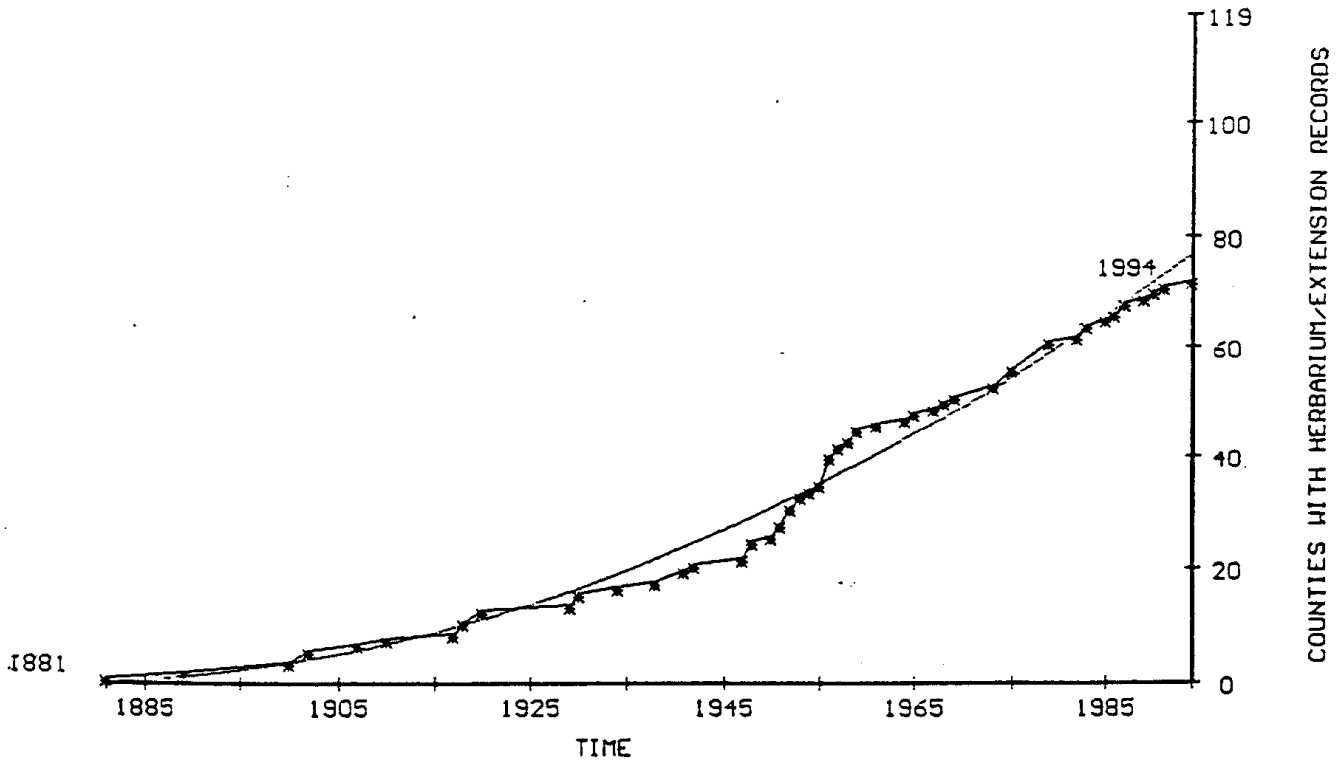
CHRYSANTHEMUM LEUCANTHEMUM INCREASE IN NORTHWEST STATES
y = 0.671583 + 0.122704*x^1 + 0.018680*x^2 - 0.000124*x^3



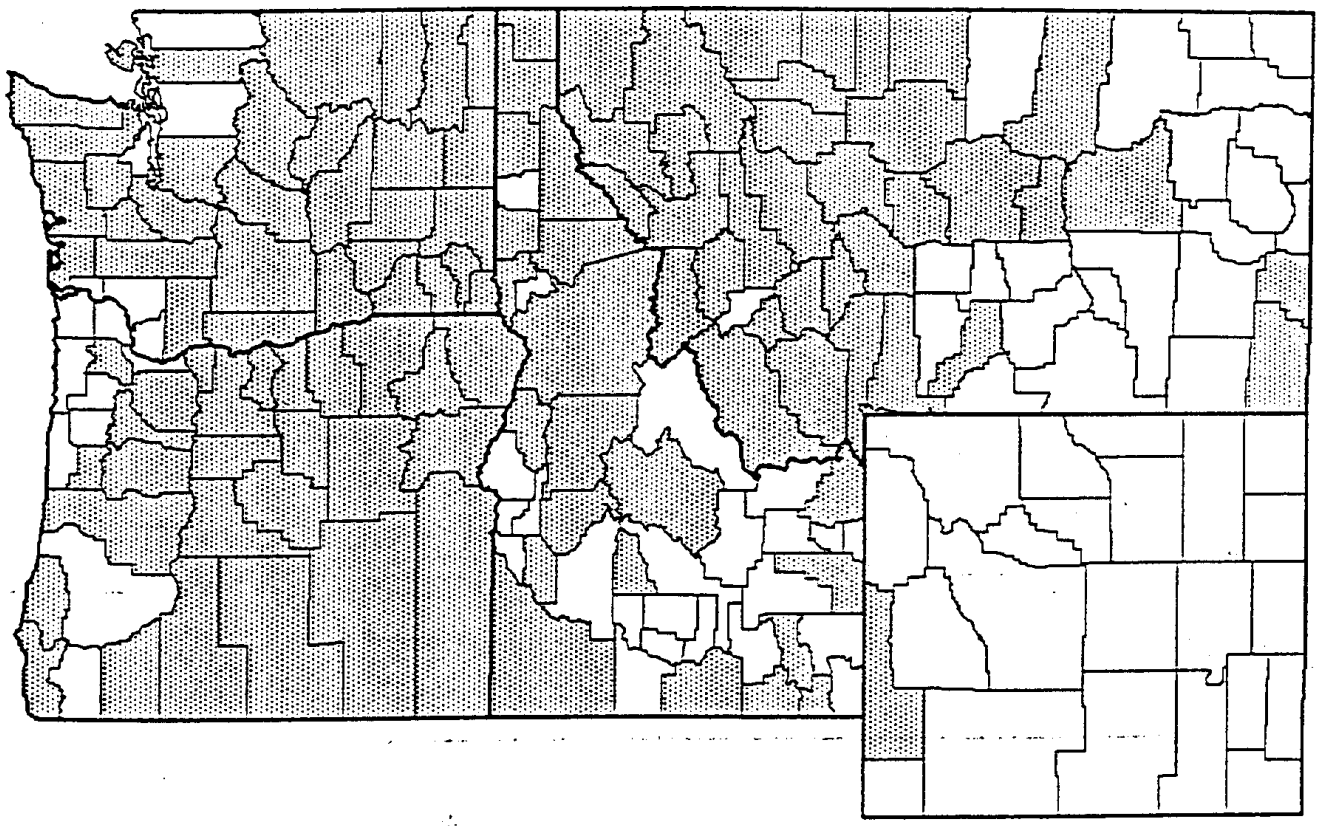
(REL 6.2) COUNTIES REPORTING CIRSIUM ARVENSE (CANADA THISTLE), 1875-1995.



CIRSIUM ARVENSE INCREASE IN NORTHWEST STATES
y = 0.292055 + 0.078780*x^1 + 0.005303*x^2

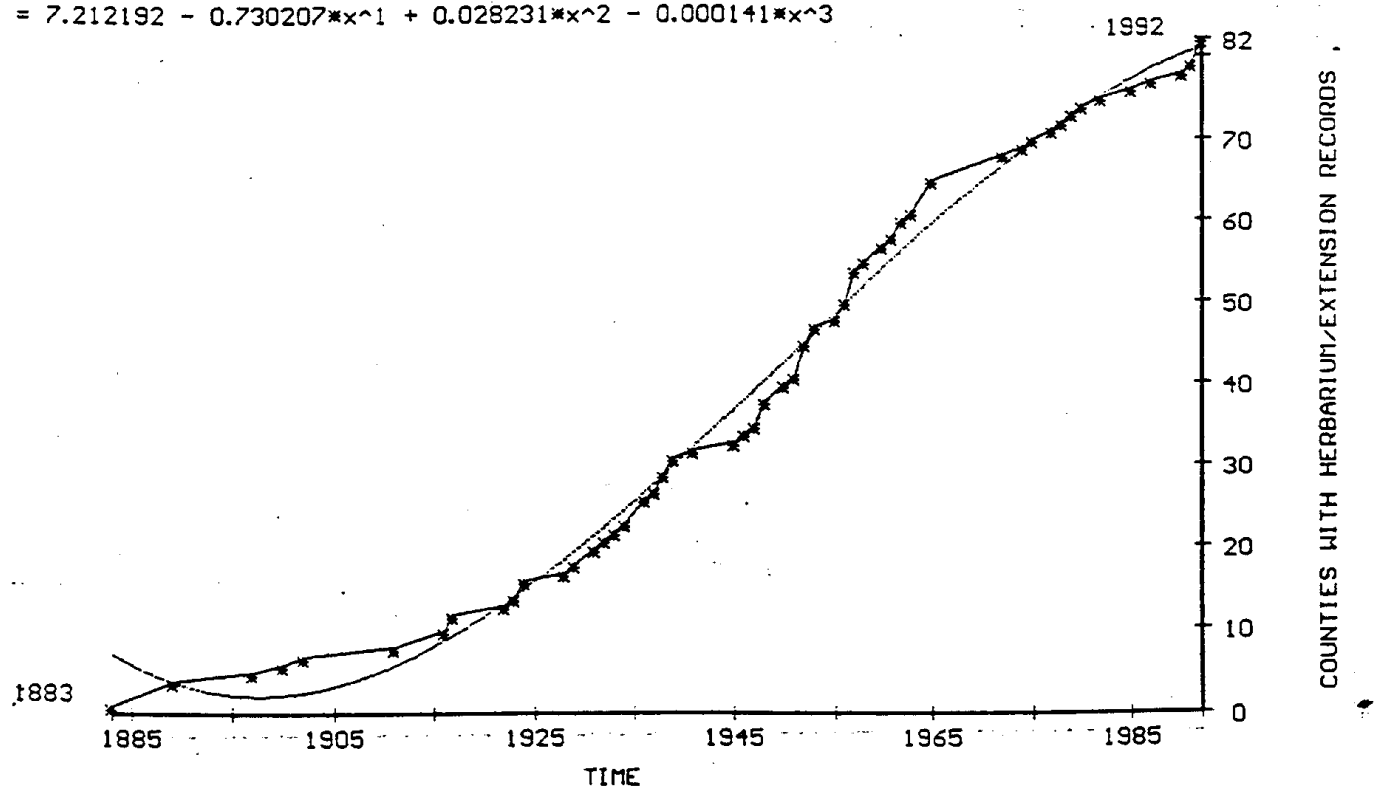


(REL 6.2) COUNTIES REPORTING CIRSIUM VULGARE (BULL THISTLE), 1875-1995.

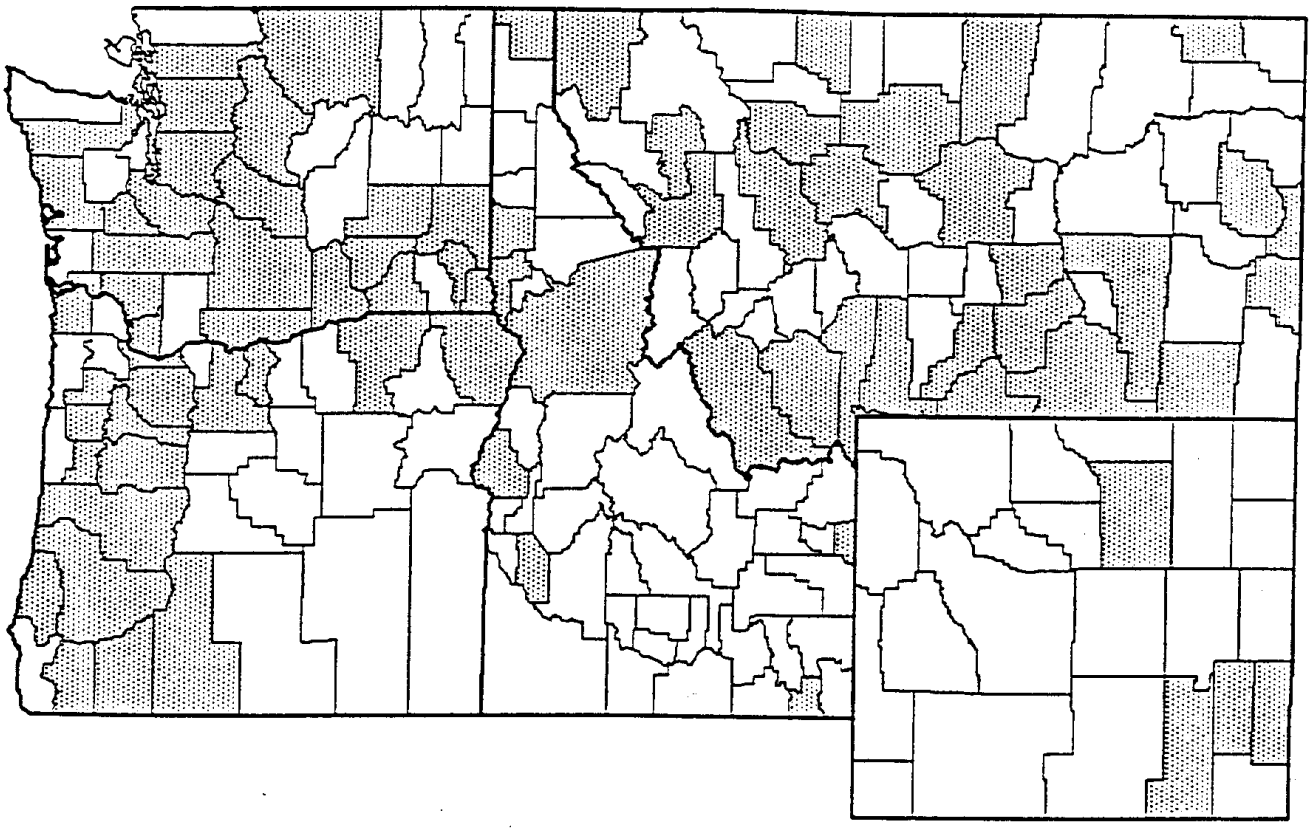


CIRSIUM VULGARE INCREASE IN NORTHWEST STATES

y = 7.212192 - 0.730207*x^1 + 0.028231*x^2 - 0.000141*x^3

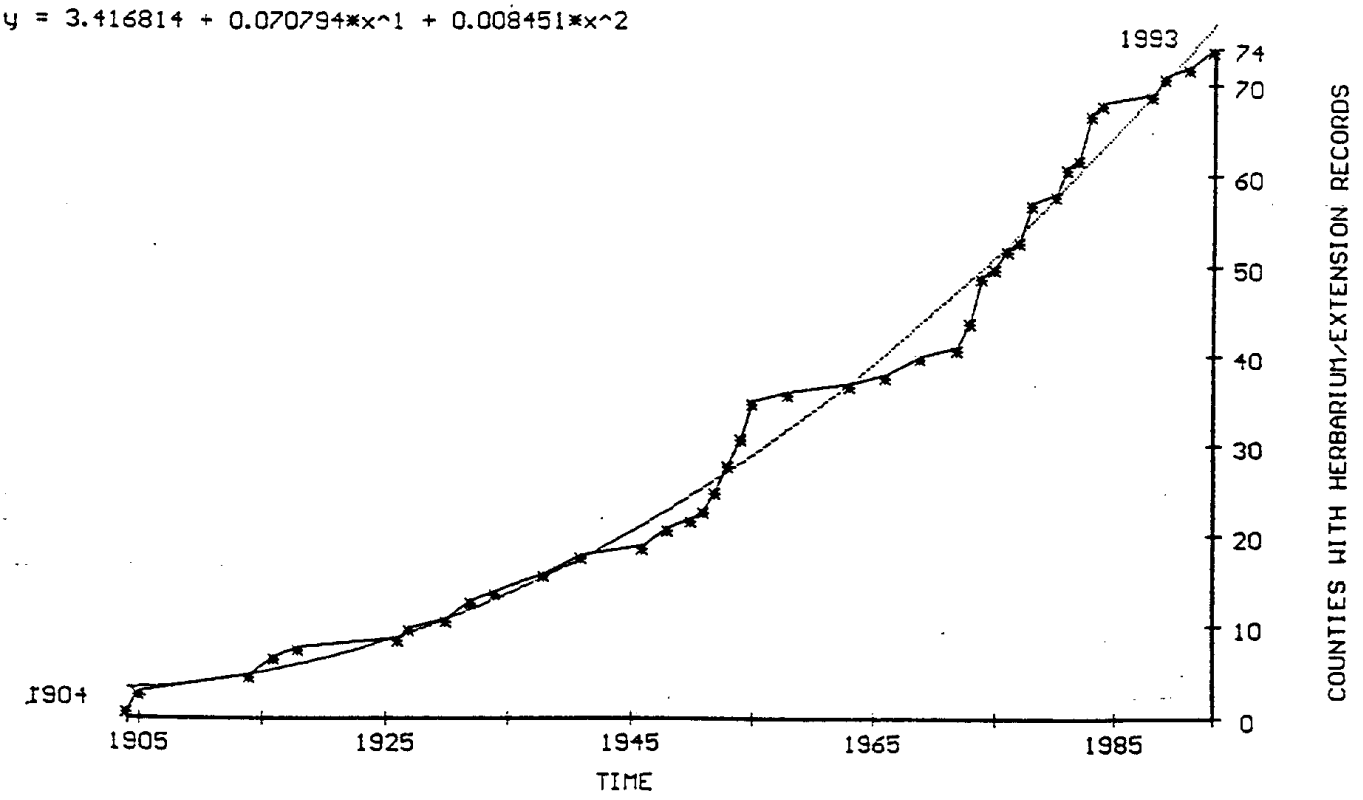


(REL 6.2) COUNTIES REPORTING CONIUM MACULATUM (POISON HEMLOCK), 1875-1995.

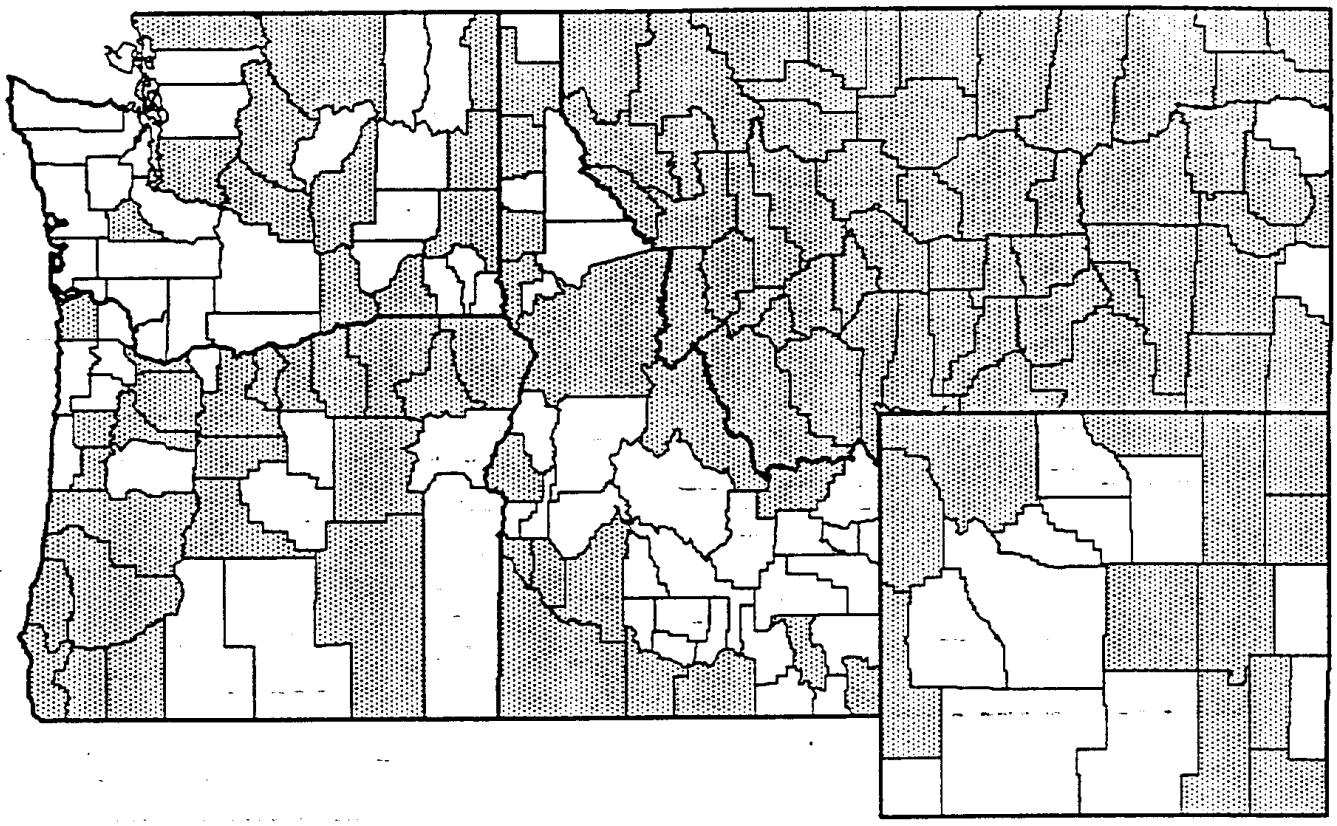


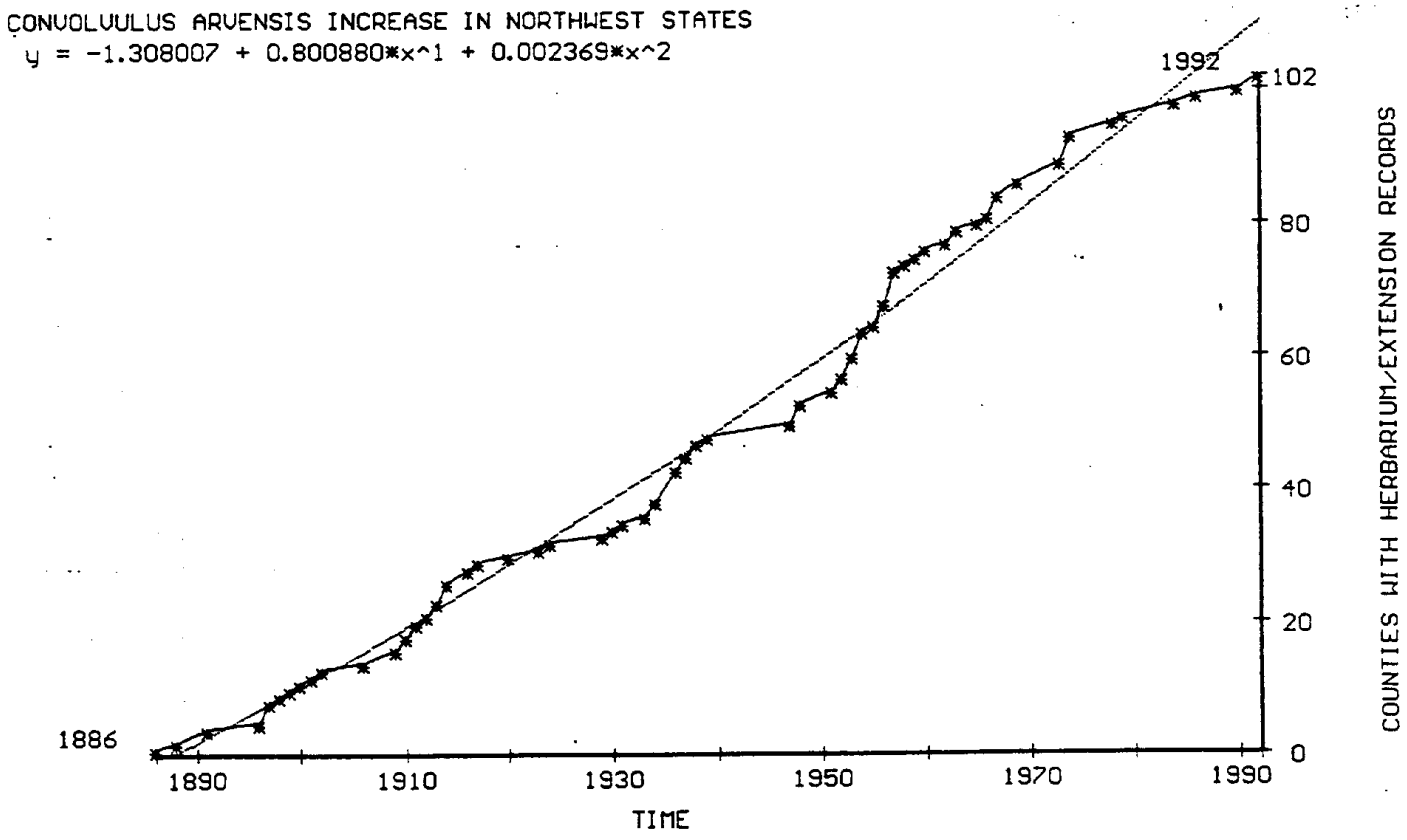
CONIUM MACULATUM INCREASE IN NORTHWEST STATES

y = 3.416814 + 0.070794*x^1 + 0.008451*x^2

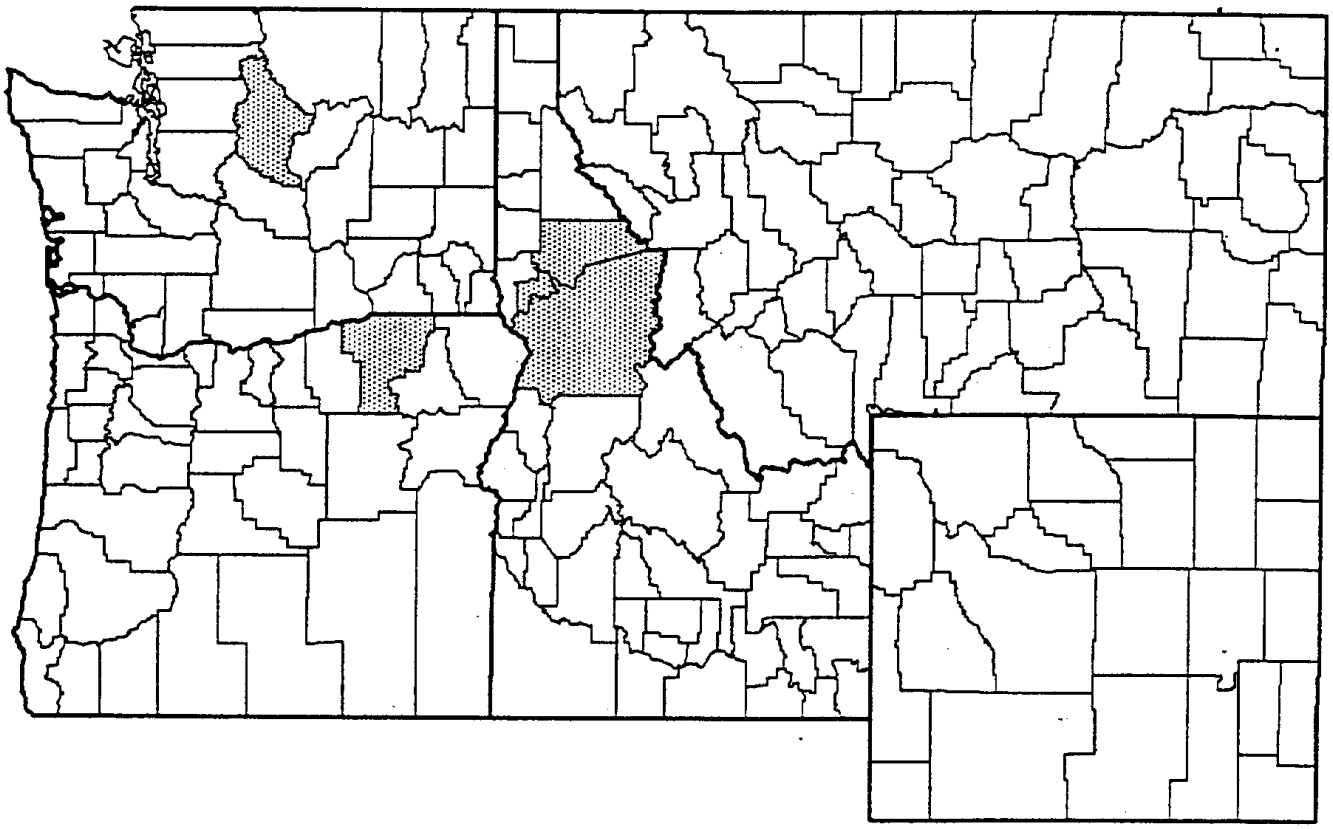


(REL 6.2) COUNTIES REPORTING CONVOLVULUS ARVENSIS (FIELD BINDWEED), 1875-1995.

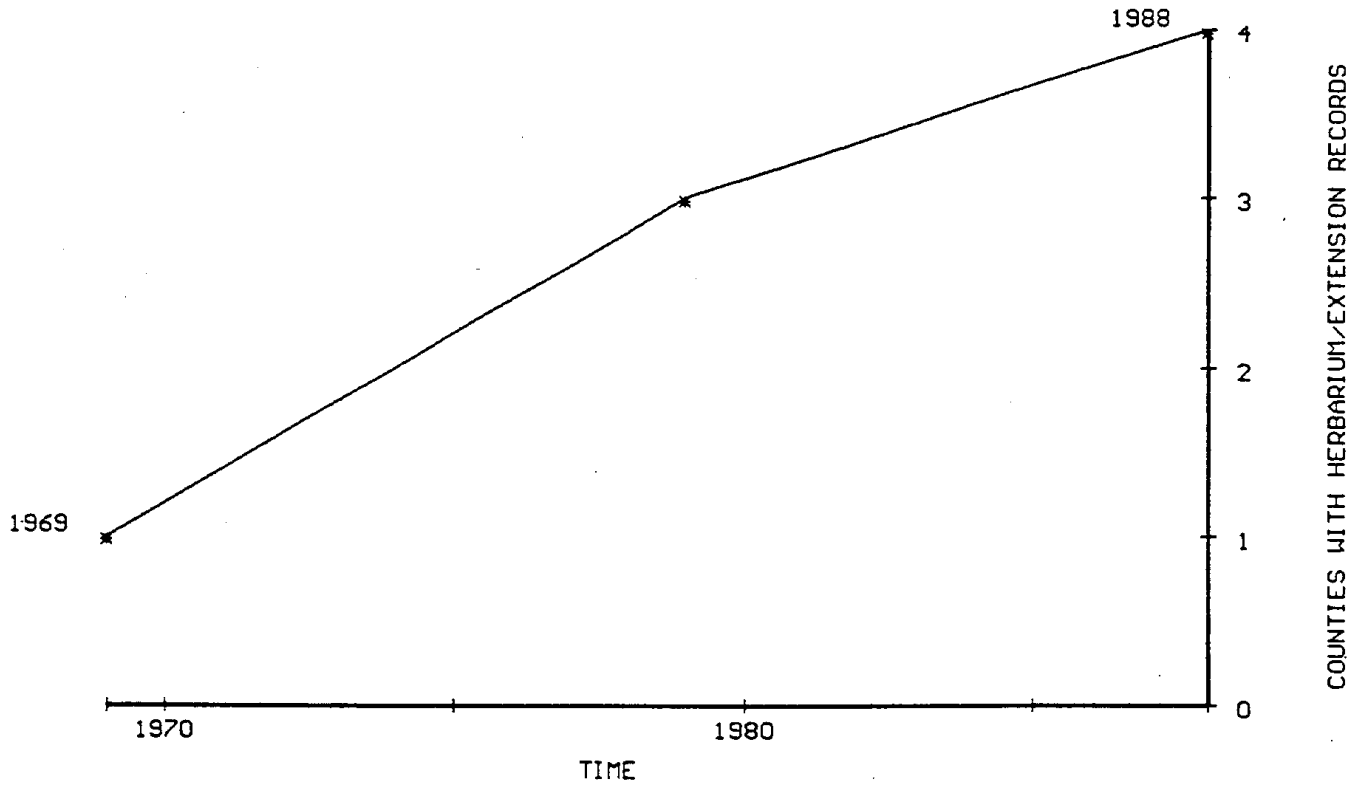




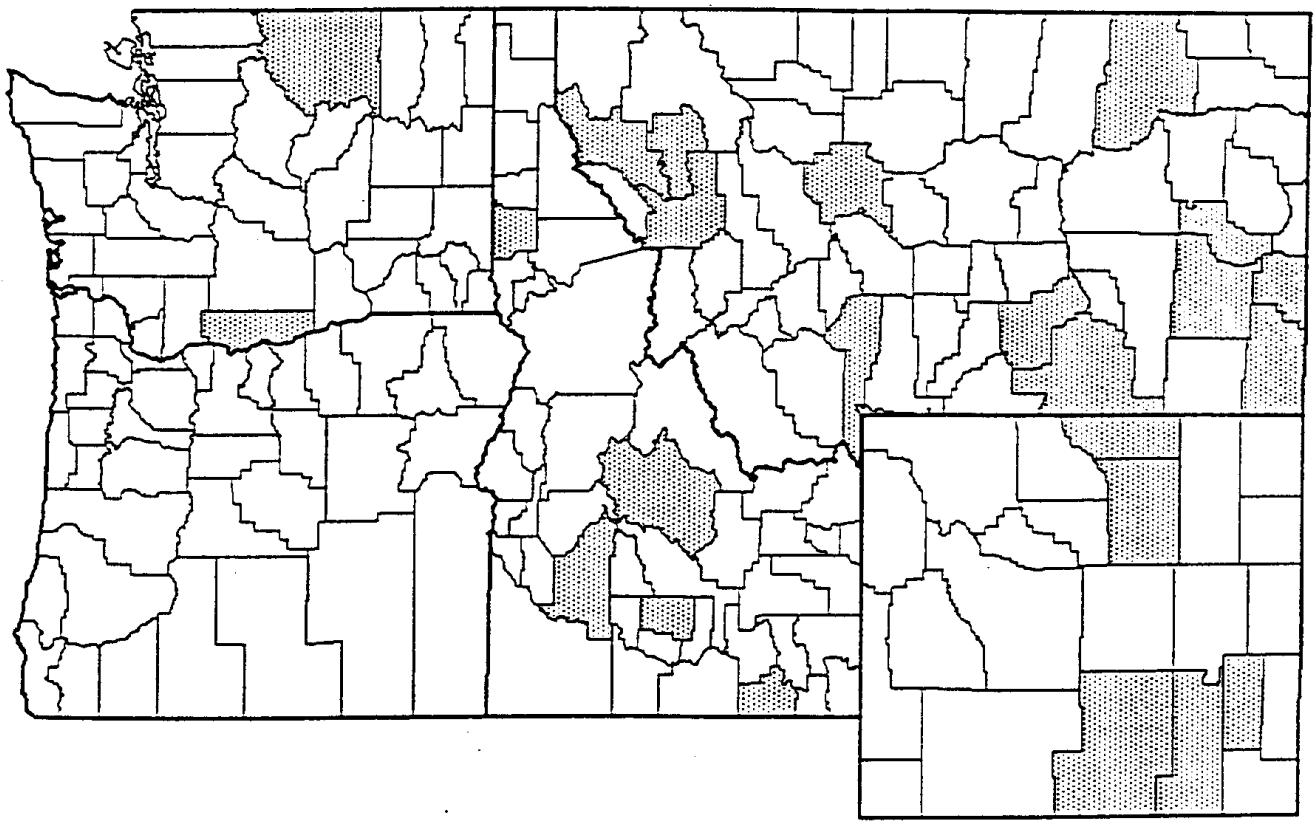
(REL 6.2) COUNTIES REPORTING CRUPINA VULGARIS (COMMON CRUPINA), 1875-1995.



CRUPINA VULGARIS INCREASE IN NORTHWEST STATES

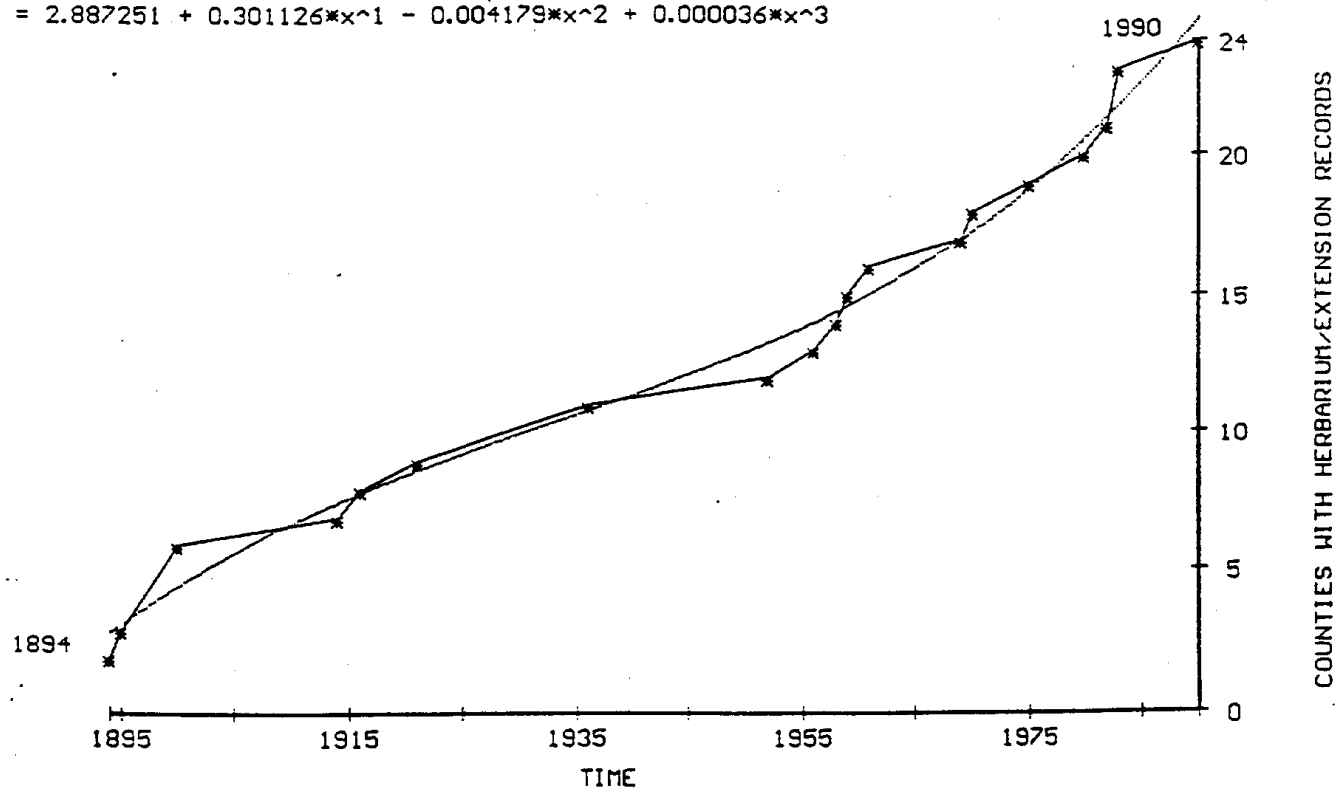


(REL 6.2) COUNTIES REPORTING CUSCUTA APPROXIMATA (CLUSTERED DODDER), 1875-1995.

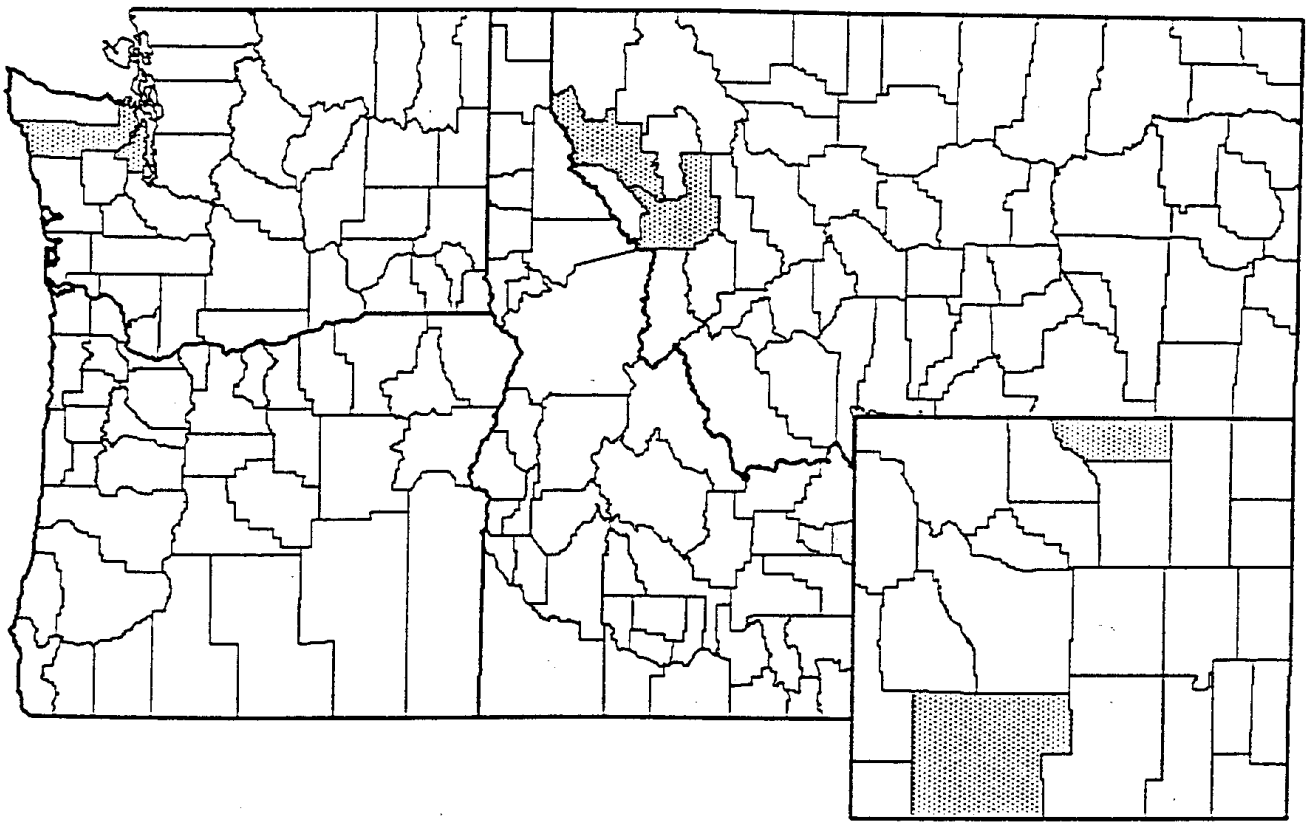


CUSCUTA APPROXIMATA INCREASE IN NORTHWEST STATES

y = 2.887251 + 0.301126*x^1 - 0.004179*x^2 + 0.000036*x^3

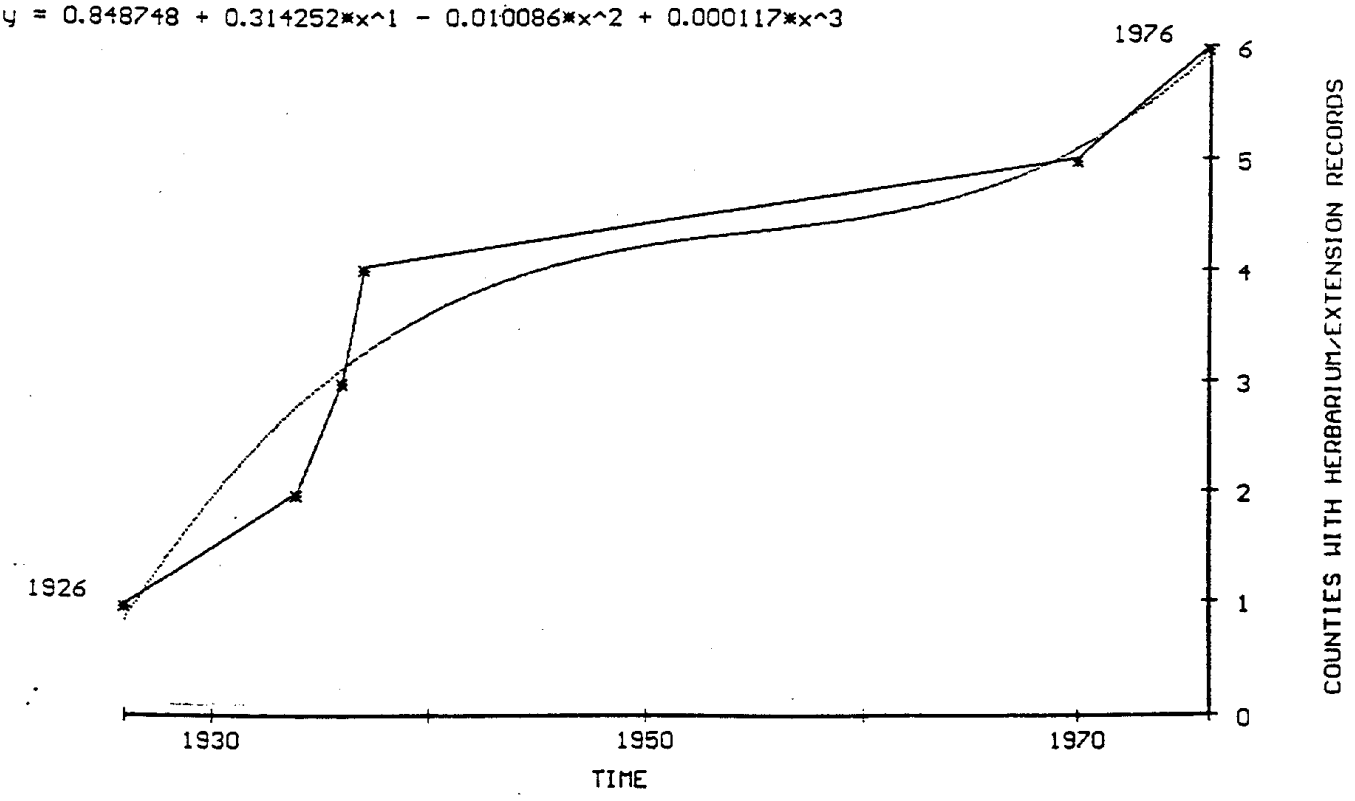


(REL 6.2) COUNTIES REPORTING CUSCUTA SPP. (DODDER), 1875-1995.

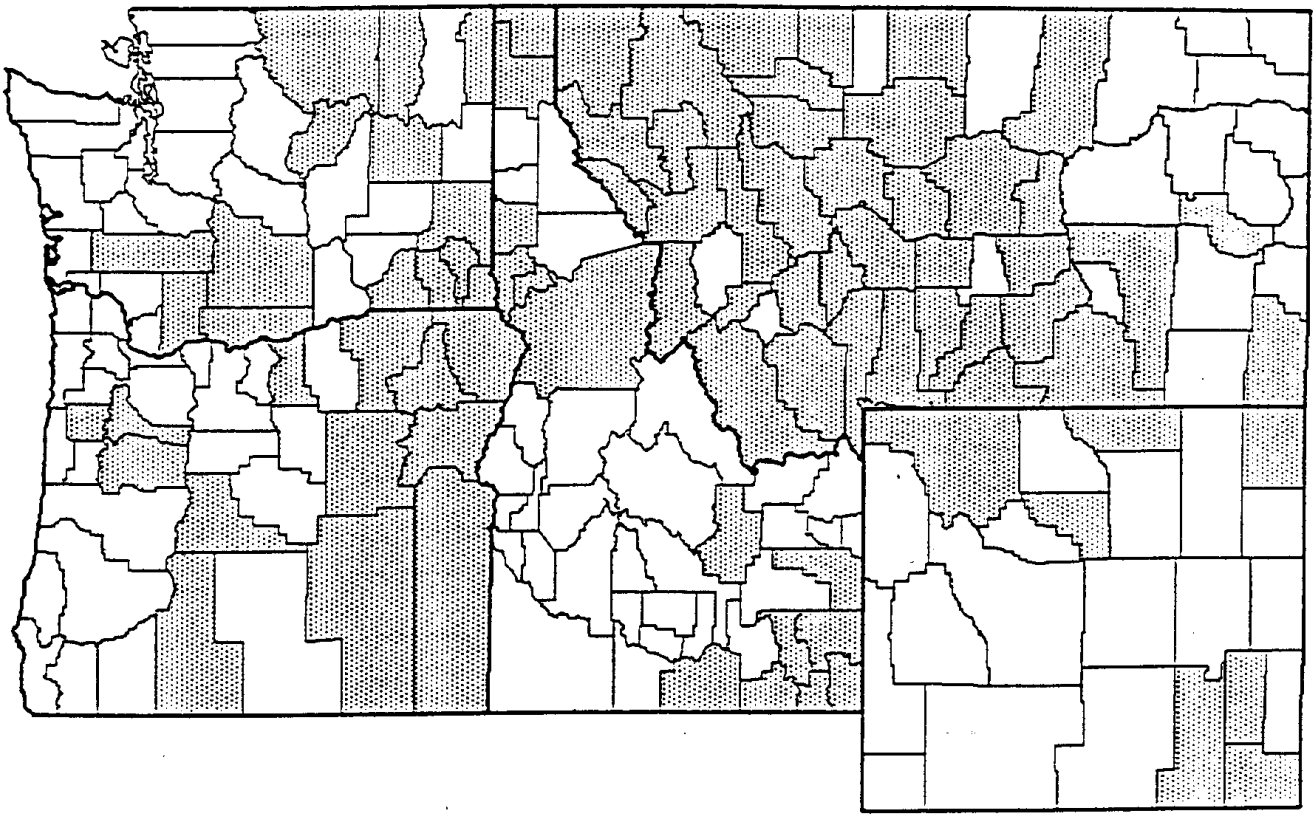


CUSCUTA SPP. INCREASE IN NORTHWEST STATES

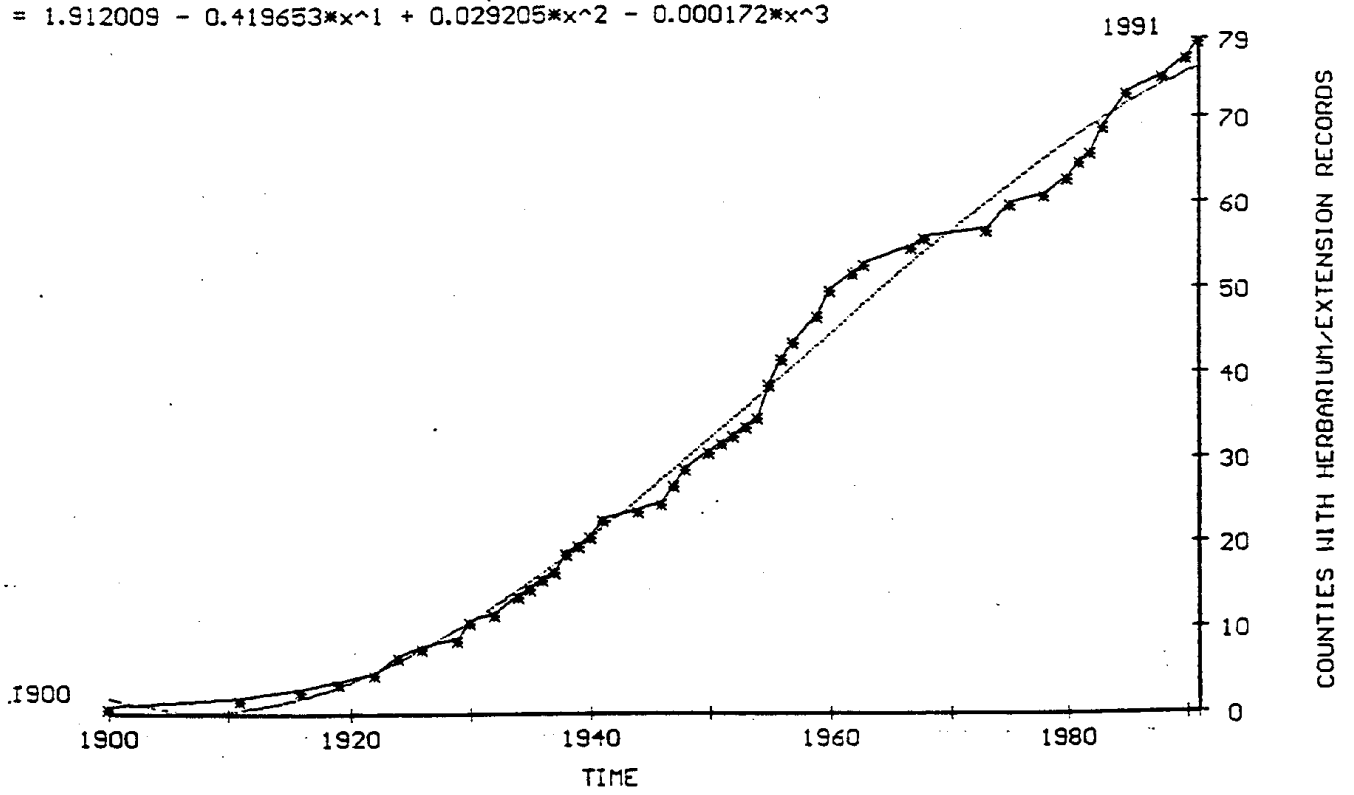
y = 0.848748 + 0.314252*x^1 - 0.010086*x^2 + 0.000117*x^3



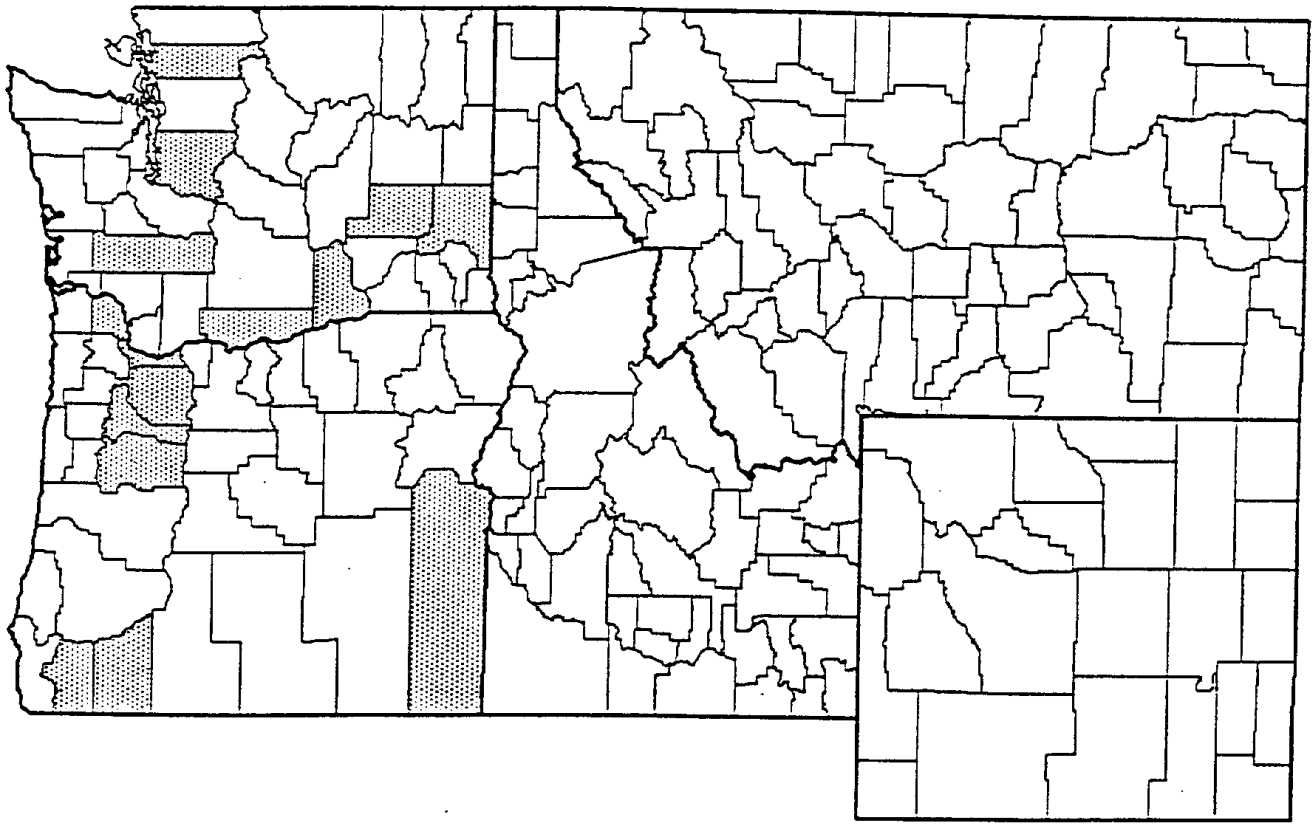
(REL 6.2) COUNTIES REPORTING CYNOGLOSSUM OFFICINALE (HOUNDSTONGUE), 1875-1995.



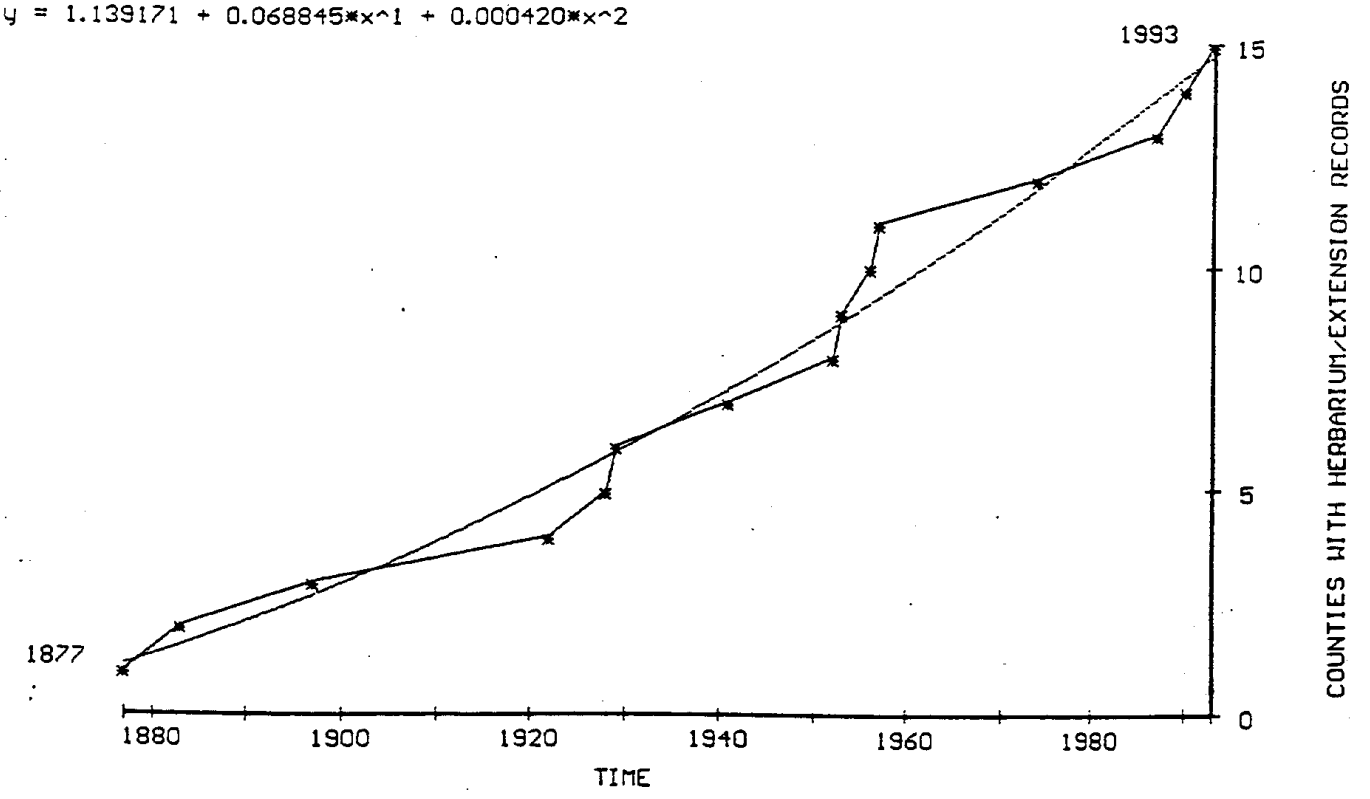
CYNOGLOSSUM OFFICINALE INCREASE IN NORTHWEST STATES
y = 1.912009 - 0.419653*x^1 + 0.029205*x^2 - 0.000172*x^3



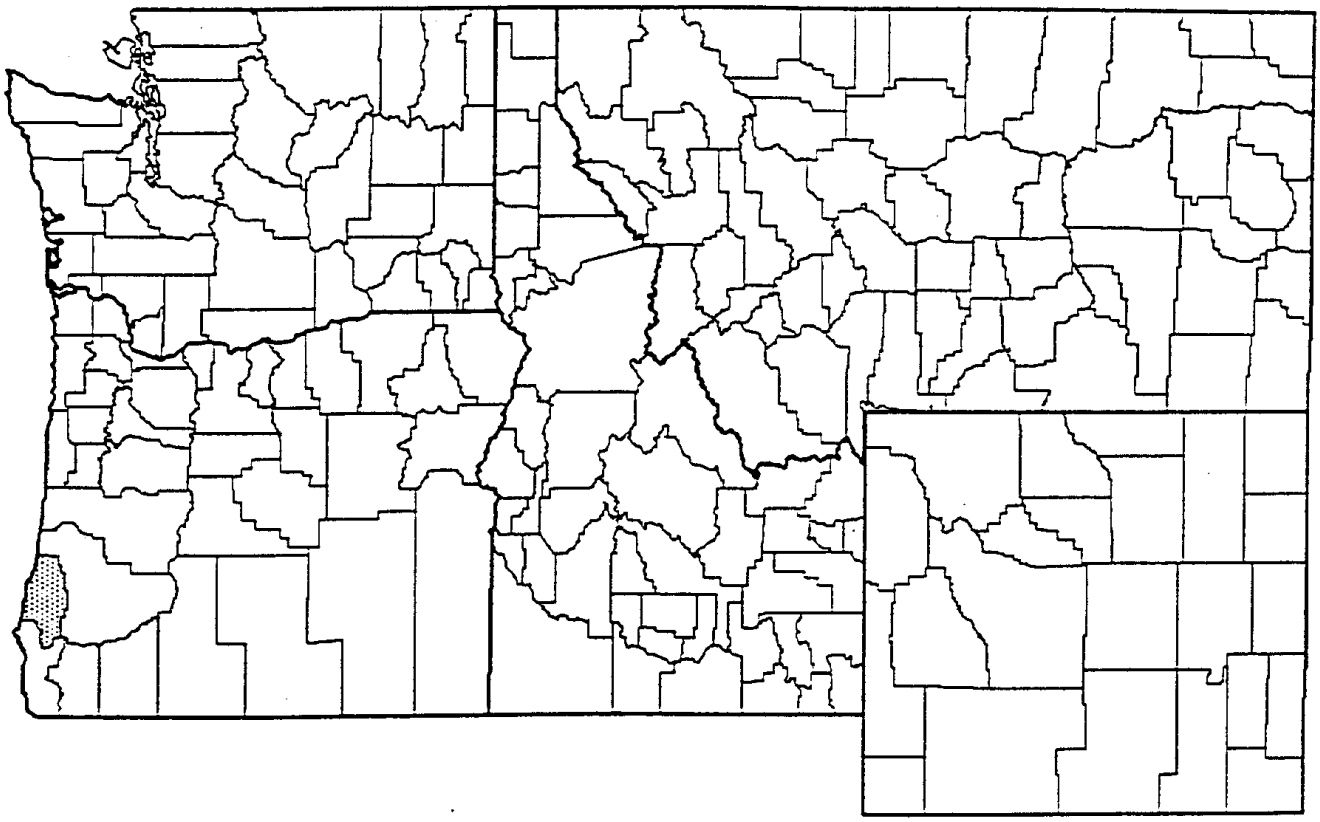
(REL 6.2) COUNTIES REPORTING CYPERUS ESCULENTUS (YELLOW NUTSEDGE), 1875-1995.



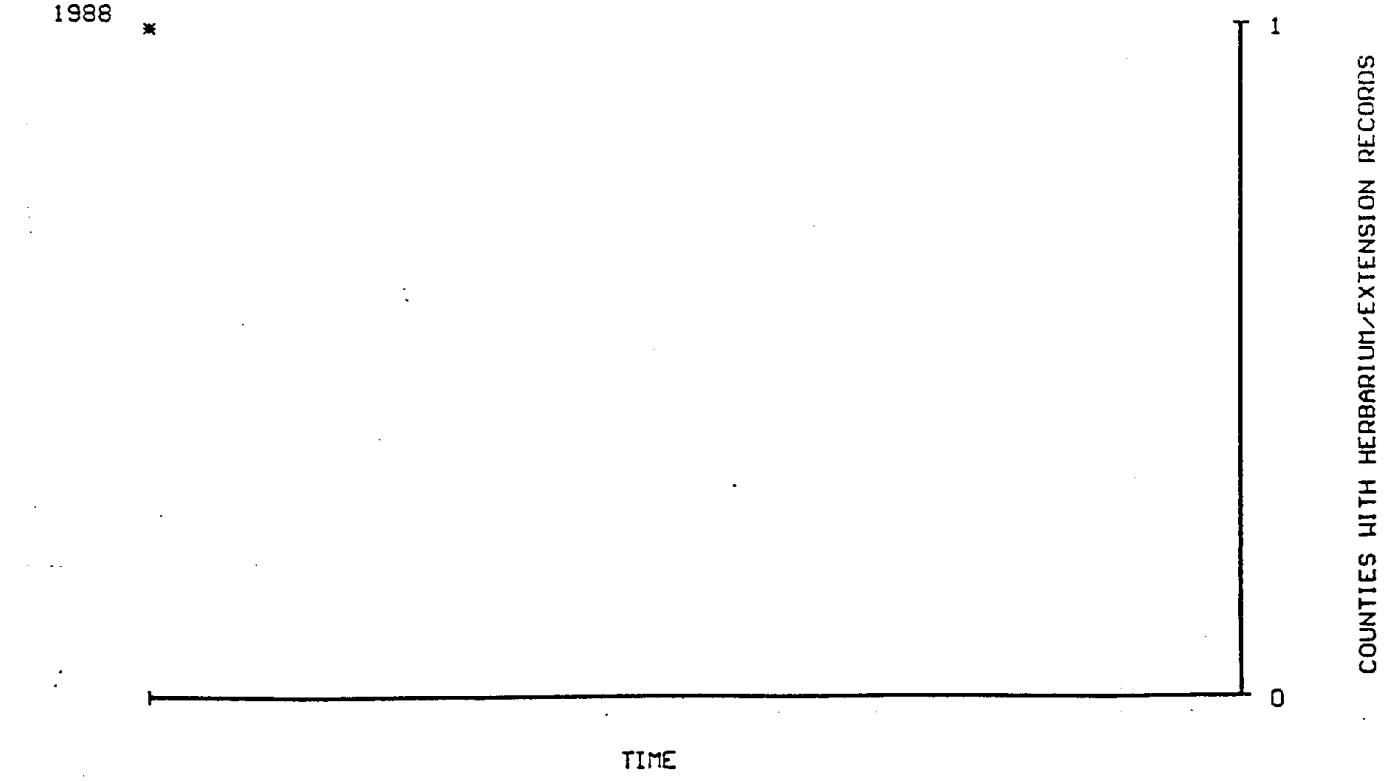
CYPERUS ESCULENTUS INCREASE IN NORTHWEST STATES
y = 1.139171 + 0.068845*x^1 + 0.000420*x^2



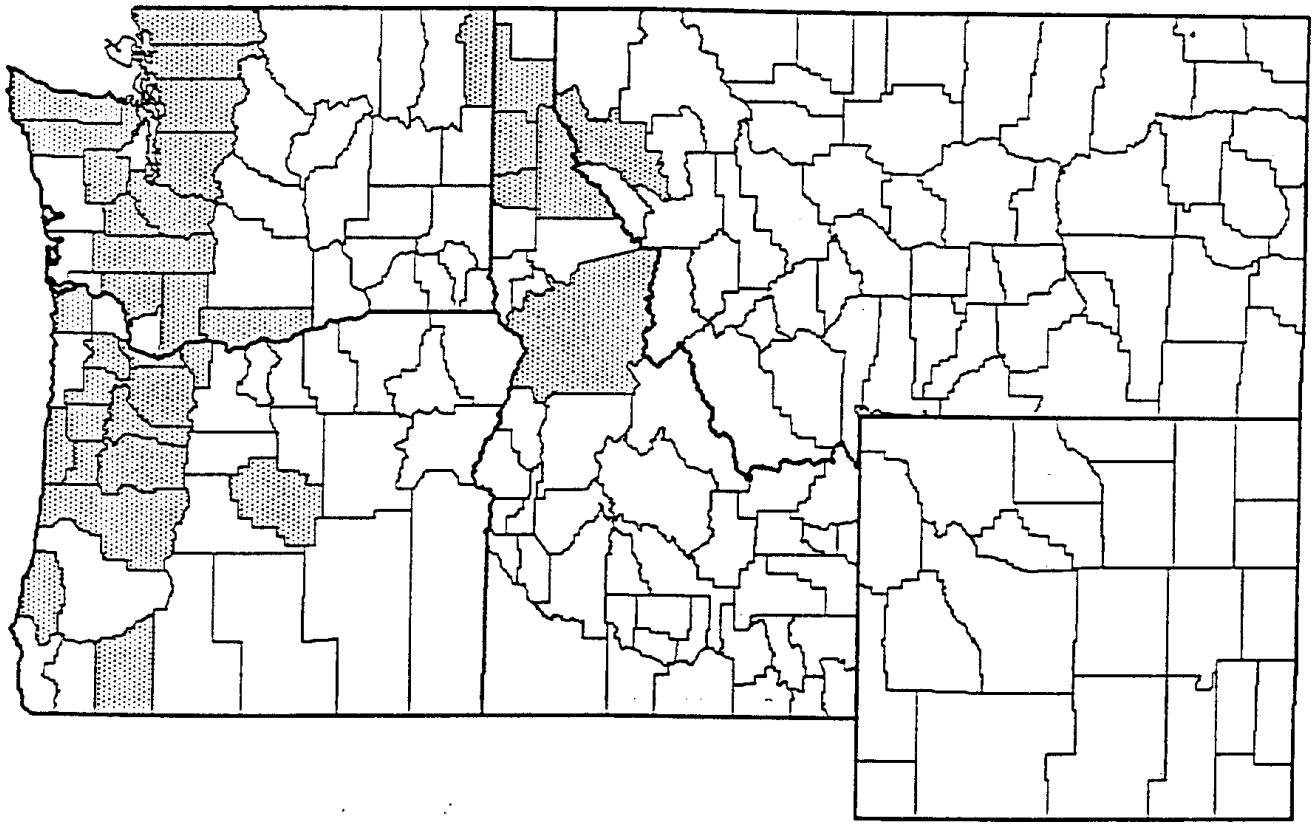
(REL 6.2) COUNTIES REPORTING CYTISUS MONSPESSULANUS (FRENCH BROOM), 1875-1995.



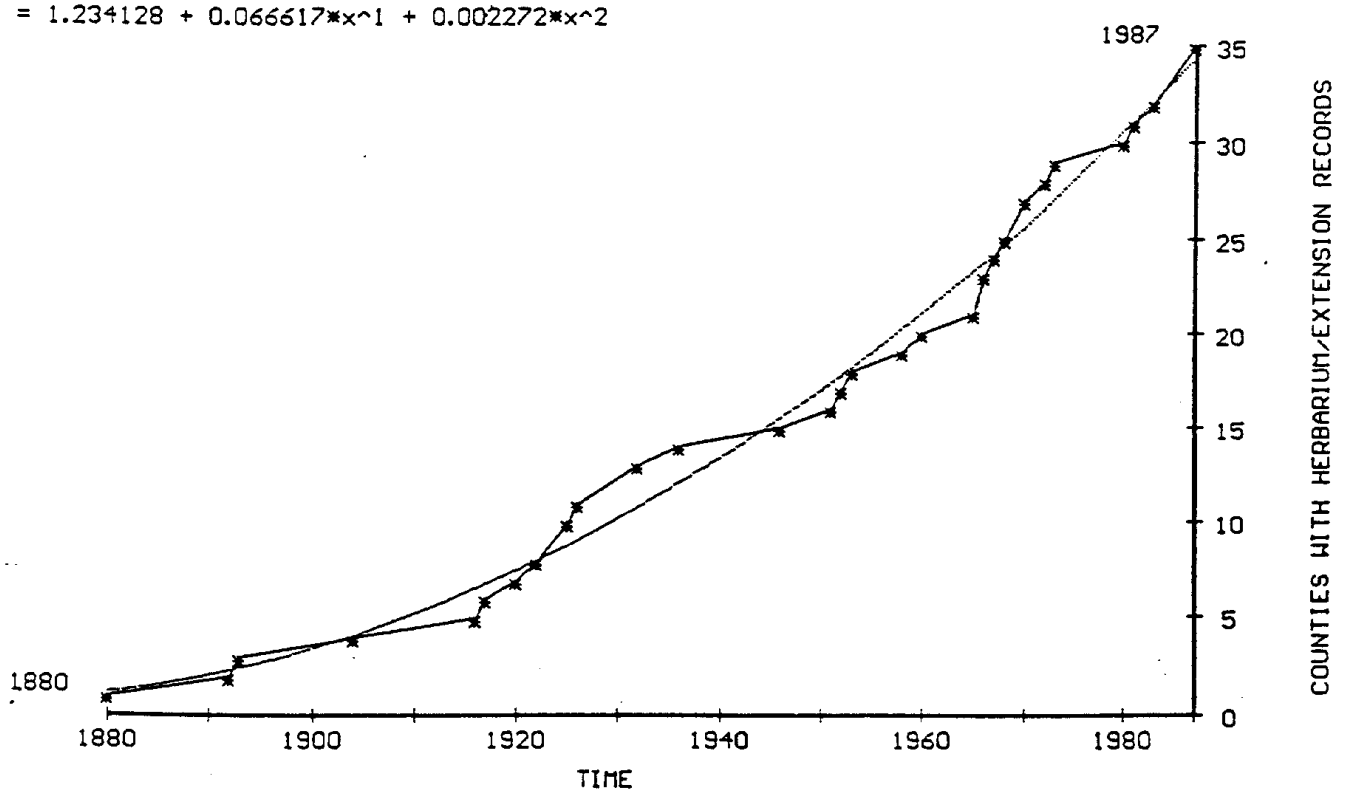
CYTISUS MONSPESSULANUS INCREASE IN NORTHWEST STATES



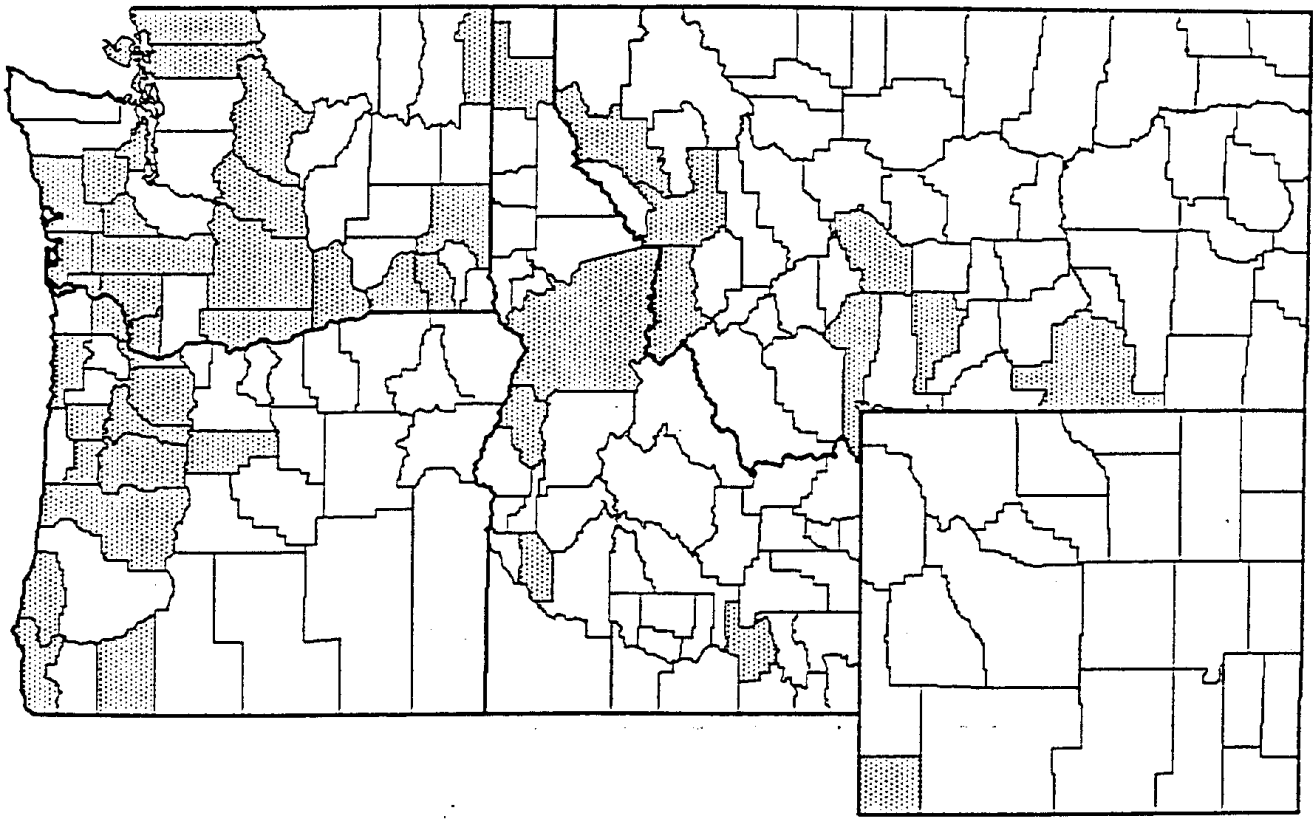
(REL 6.2) COUNTIES REPORTING CYTISUS SCOPARIUS (SCOTCH BROOM), 1875-1995.



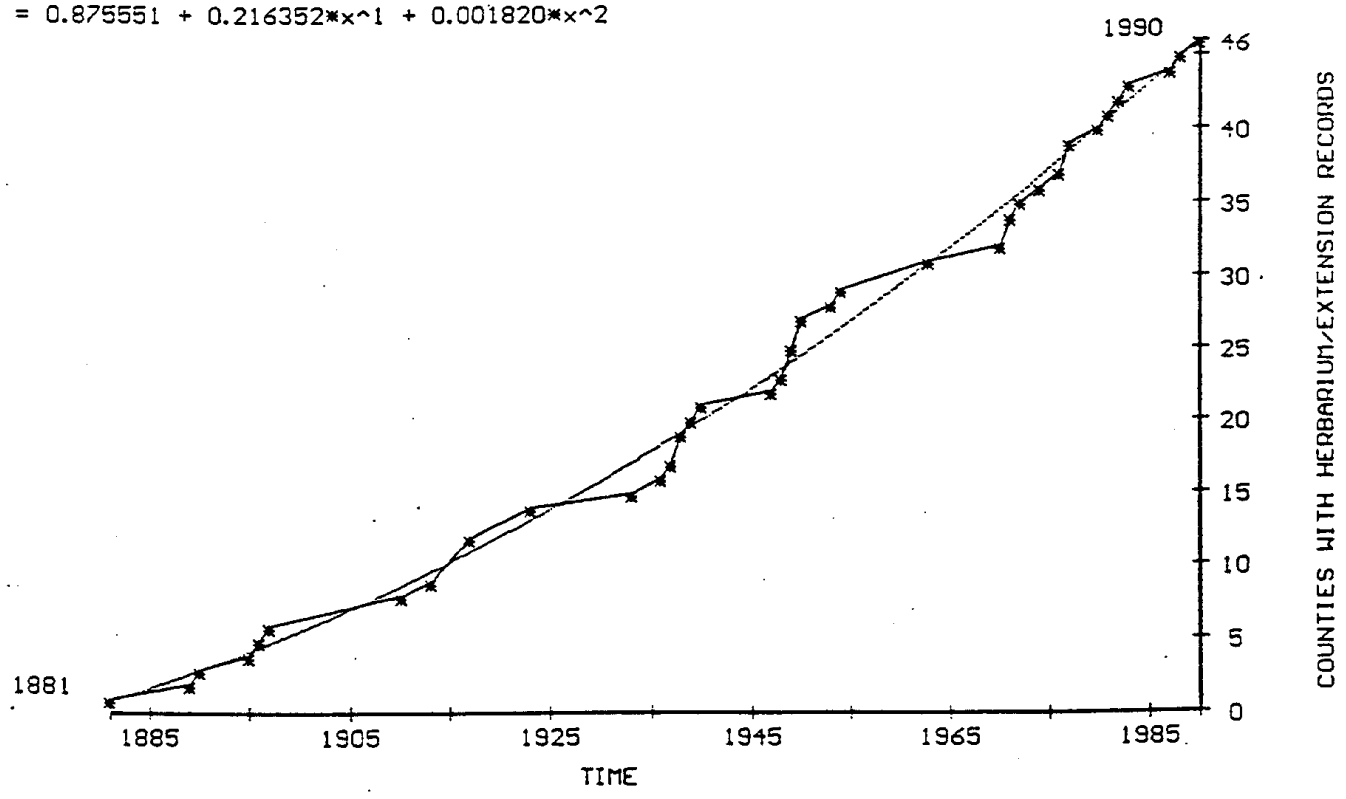
CYTISUS SCOPARIUS INCREASE IN NORTHWEST STATES
y = 1.234128 + 0.066617*x^1 + 0.002272*x^2



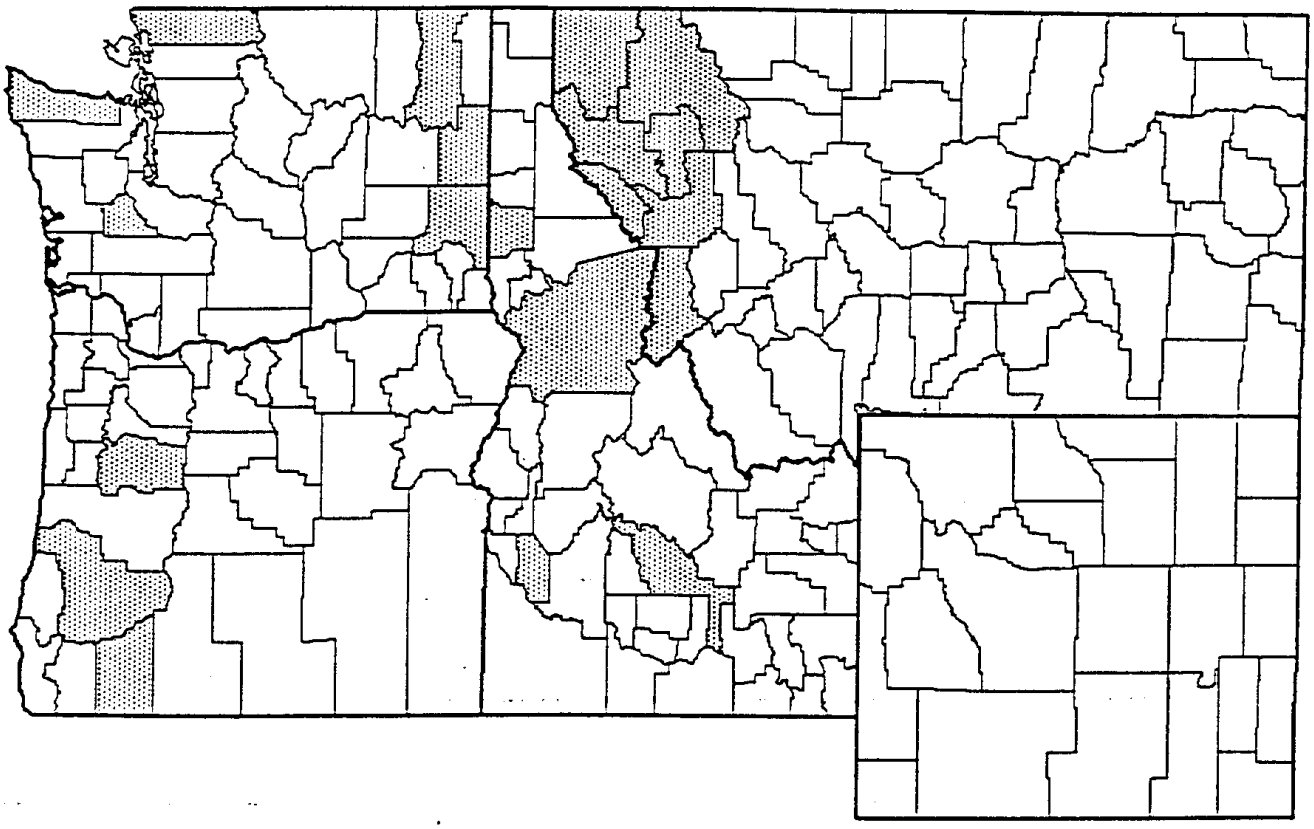
(REL 6.2) COUNTIES REPORTING DAUCUS CAROTA (WILD CARROT), 1875-1995.



DAUCUS CAROTA INCREASE IN NORTHWEST STATES
y = 0.875551 + 0.216352*x^1 + 0.001820*x^2

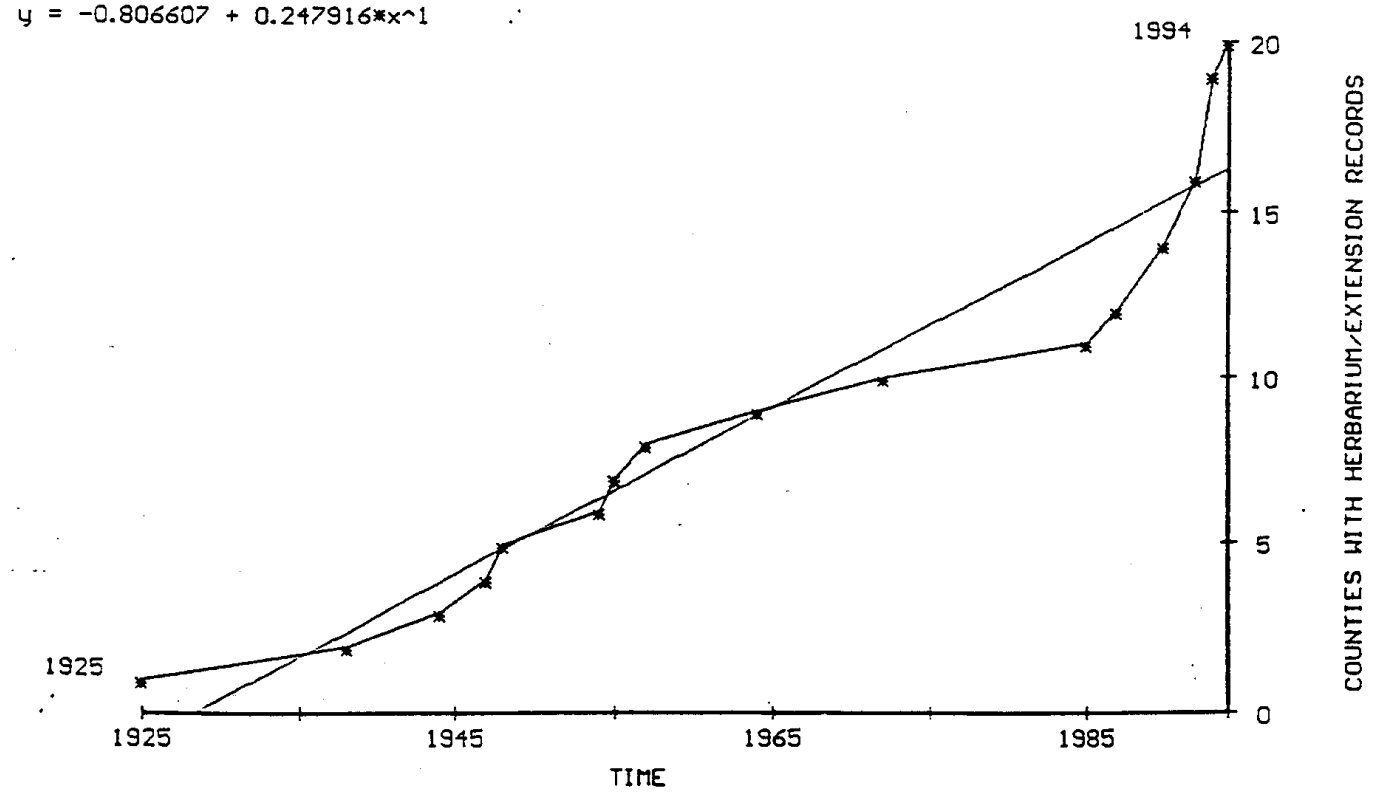


(REL 6.2) COUNTIES REPORTING ECHIUM VULGARE (BLUEWEED), 1875-1995.

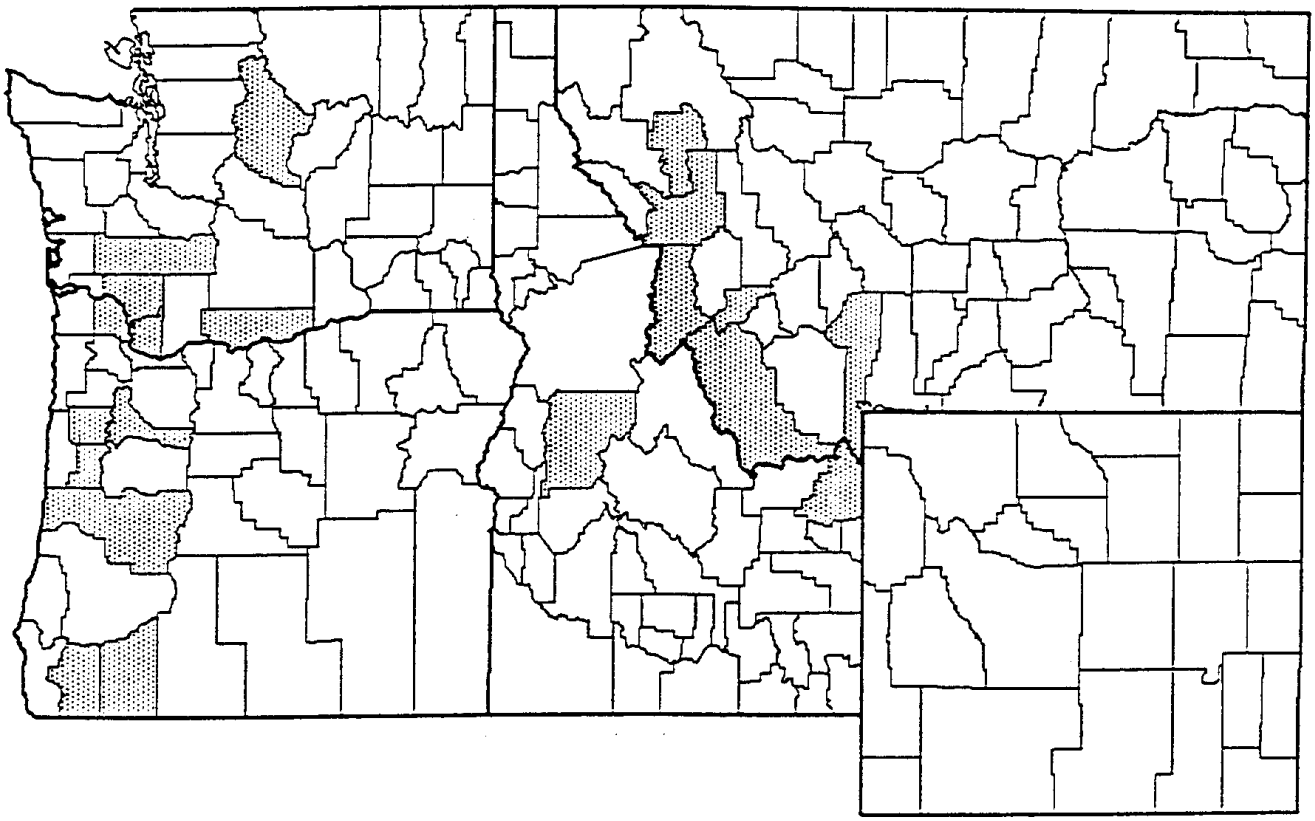


ECHIUM VULGARE INCREASE IN NORTHWEST STATES

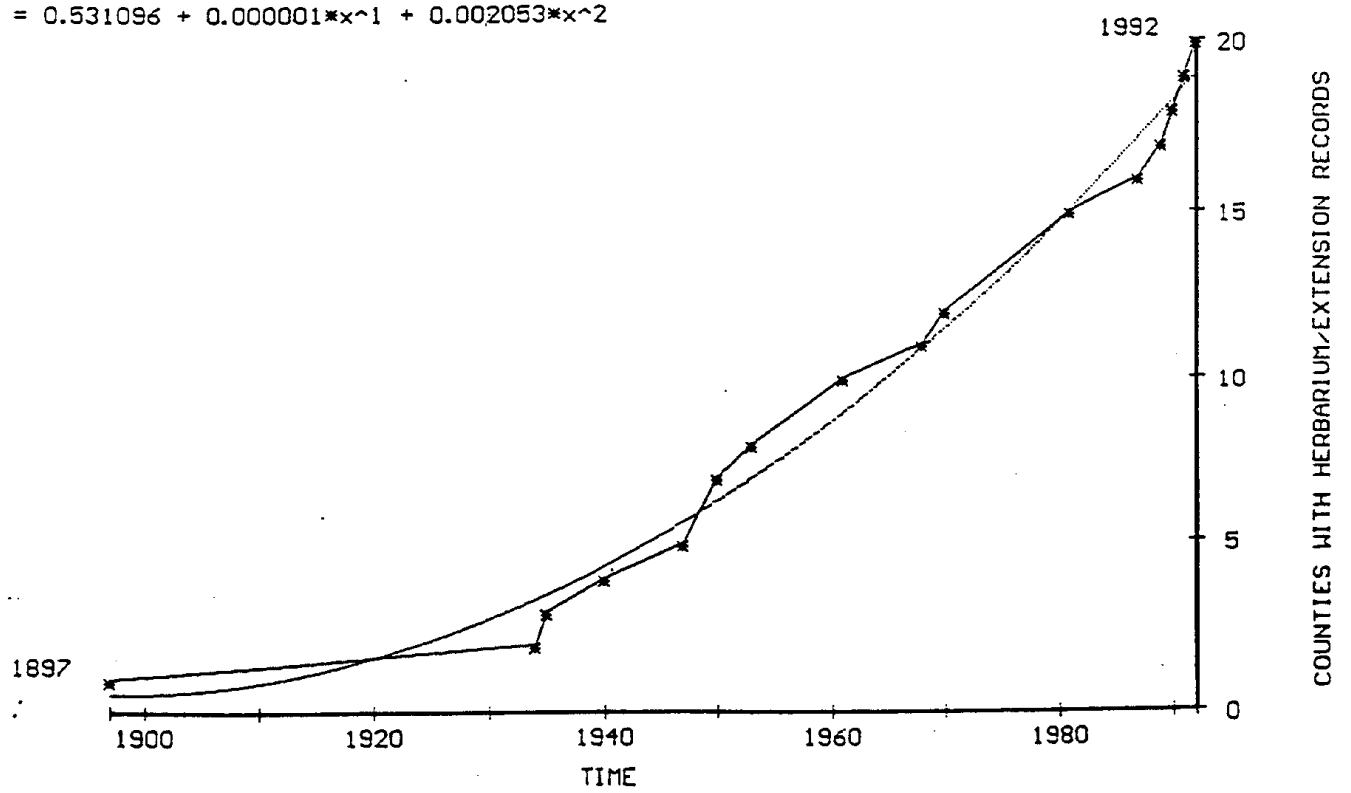
y = -0.806607 + 0.247916*x^1



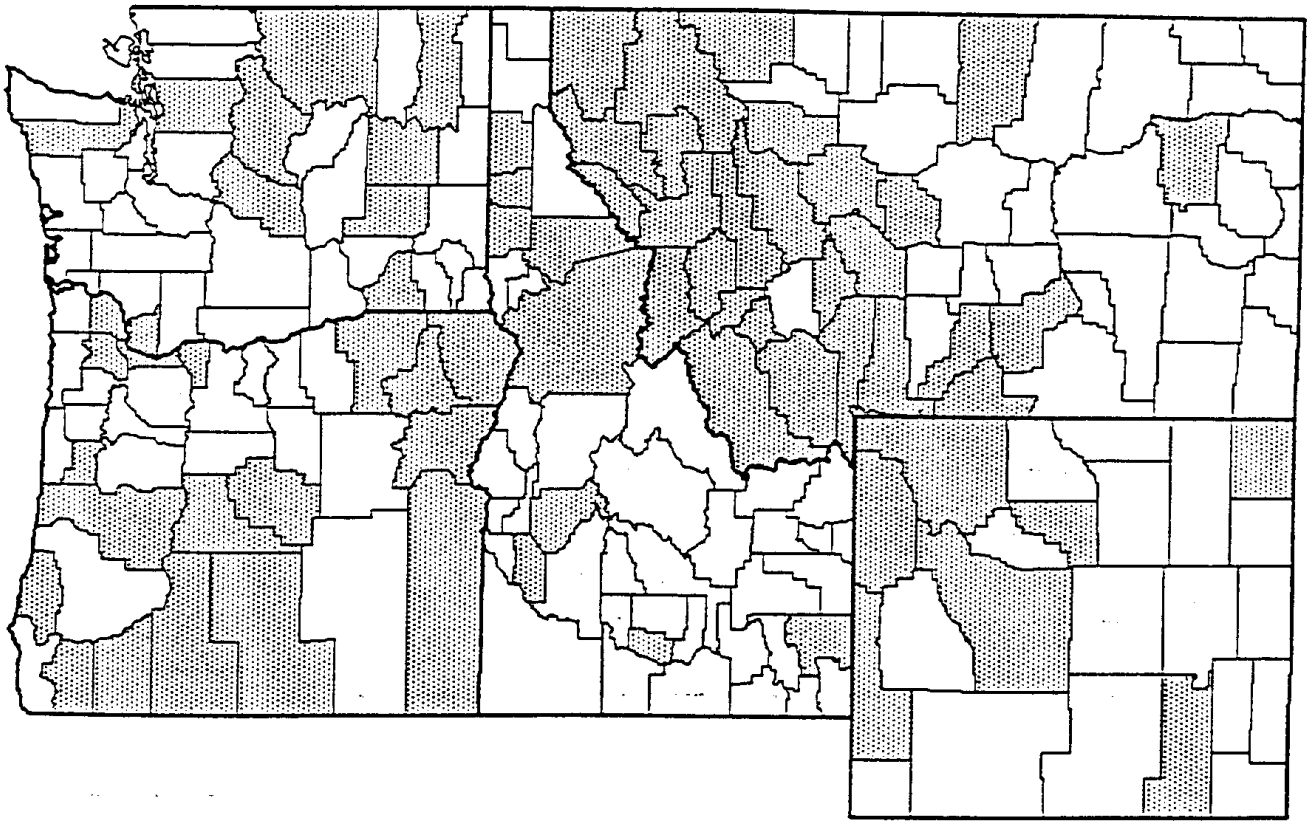
(REL 6.2) COUNTIES REPORTING EGERIA DENSA (BRAZILLIAN ELODEA), 1875-1995.



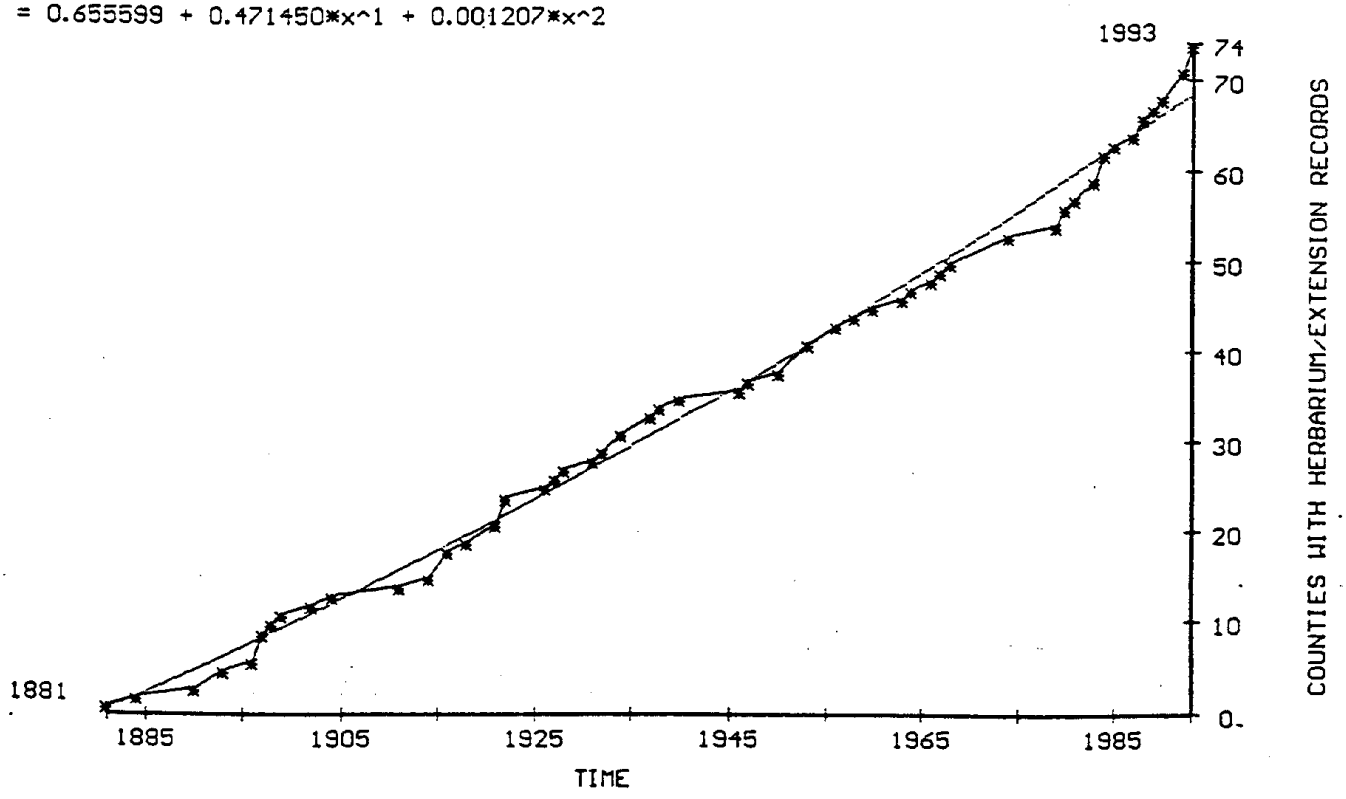
EGERIA DENSA INCREASE IN NORTHWEST STATES
y = 0.531096 + 0.000001*x^1 + 0.002053*x^2



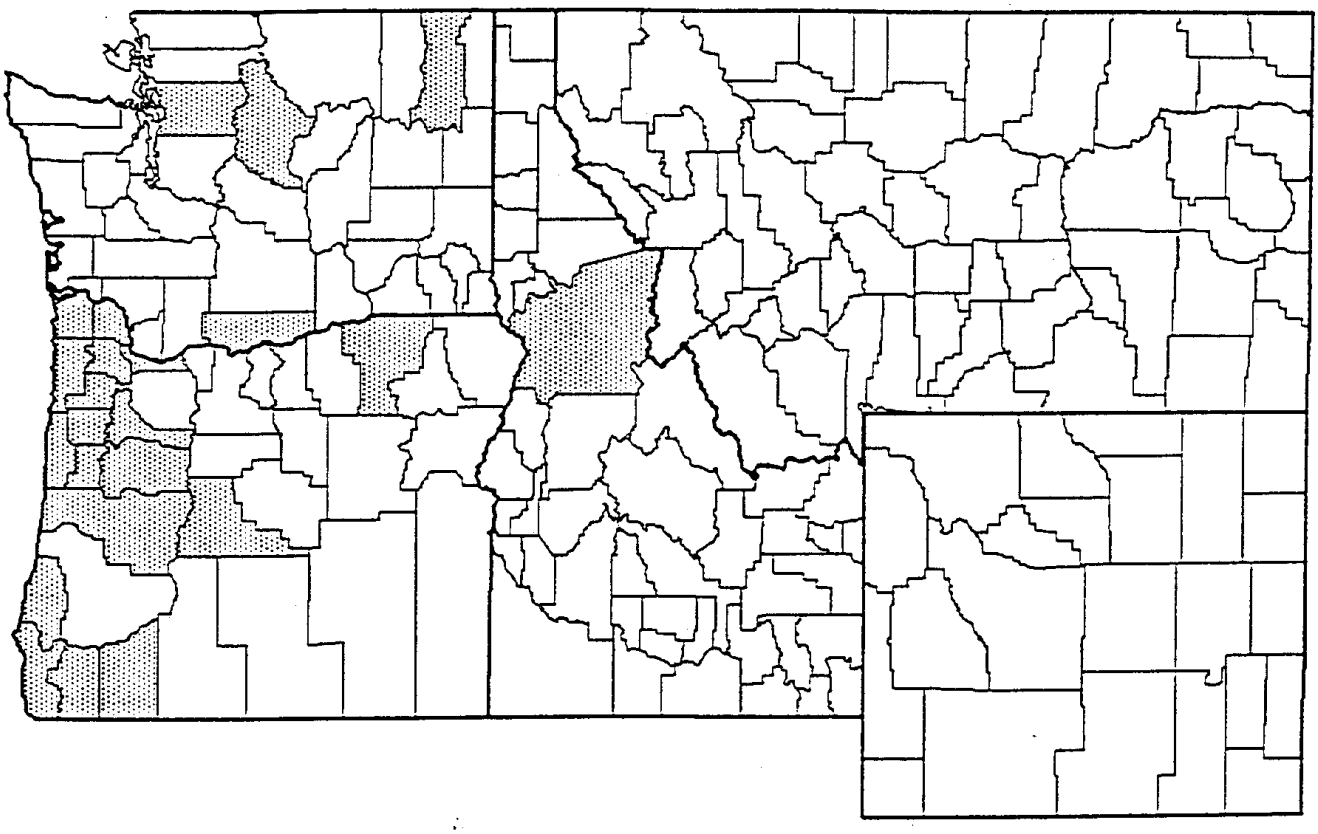
(REL 6.2) COUNTIES REPORTING EQUISETUM ARVENSE (FIELD HORSETAIL), 1875-1995.



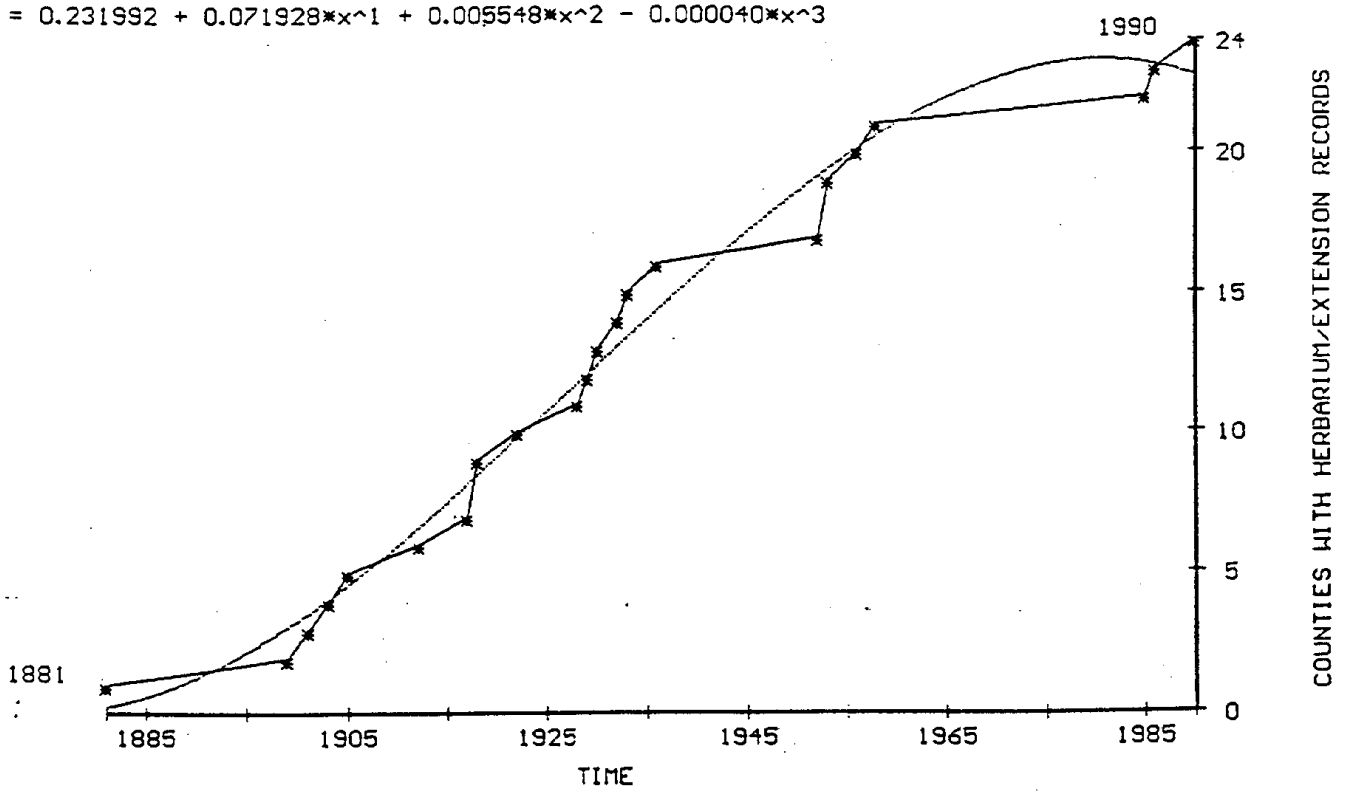
EQUISETUM ARVENSE INCREASE IN NORTHWEST STATES
y = 0.655599 + 0.471450*x^1 + 0.001207*x^2



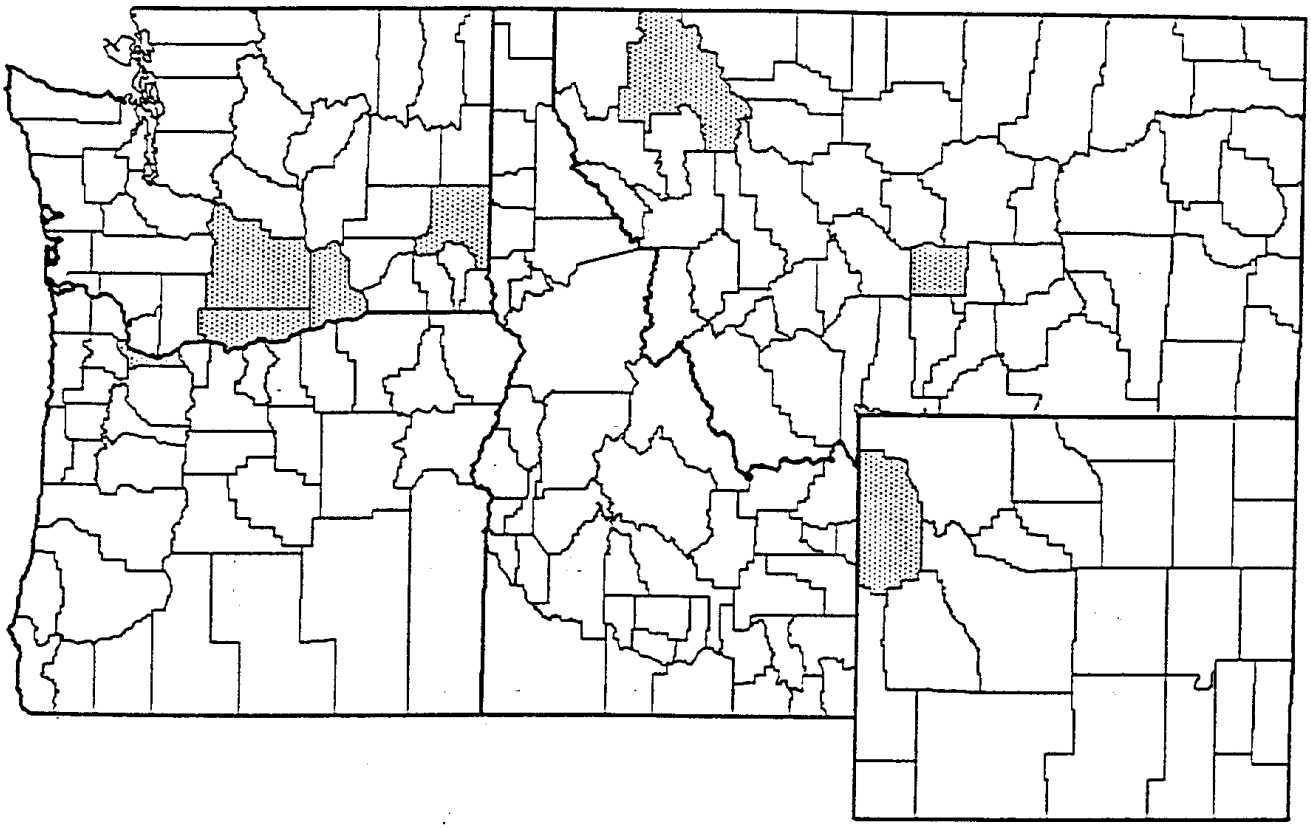
(REL 6.2) COUNTIES REPORTING EQUISETUM TELMATEIA (GIANT HORSETAIL), 1875-1995.



EQUISETUM TELMATEIA INCREASE IN NORTHWEST STATES
y = 0.231992 + 0.071928*x^1 + 0.005548*x^2 - 0.000040*x^3

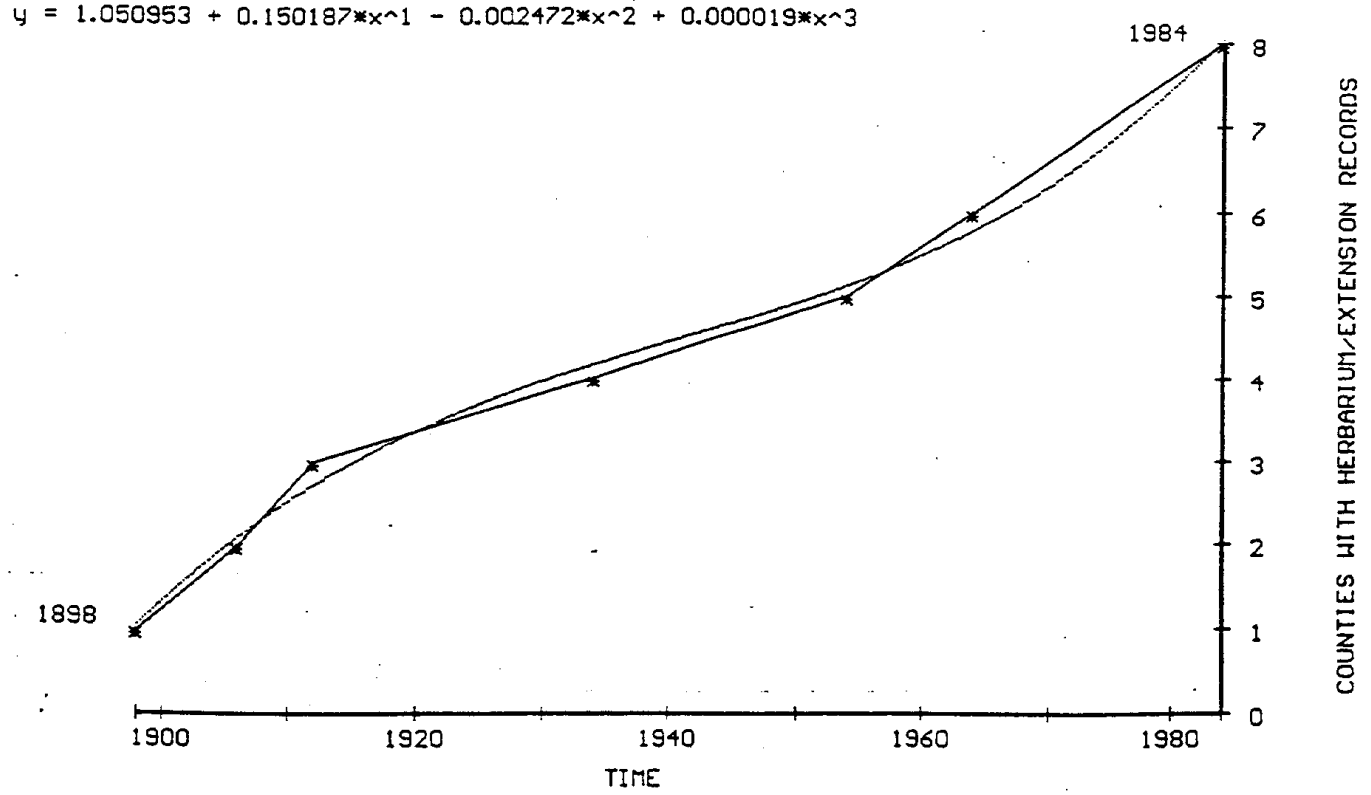


(REL 6.2) COUNTIES REPORTING ERUCA SATIVA (GARDEN ROCKET), 1875-1995.

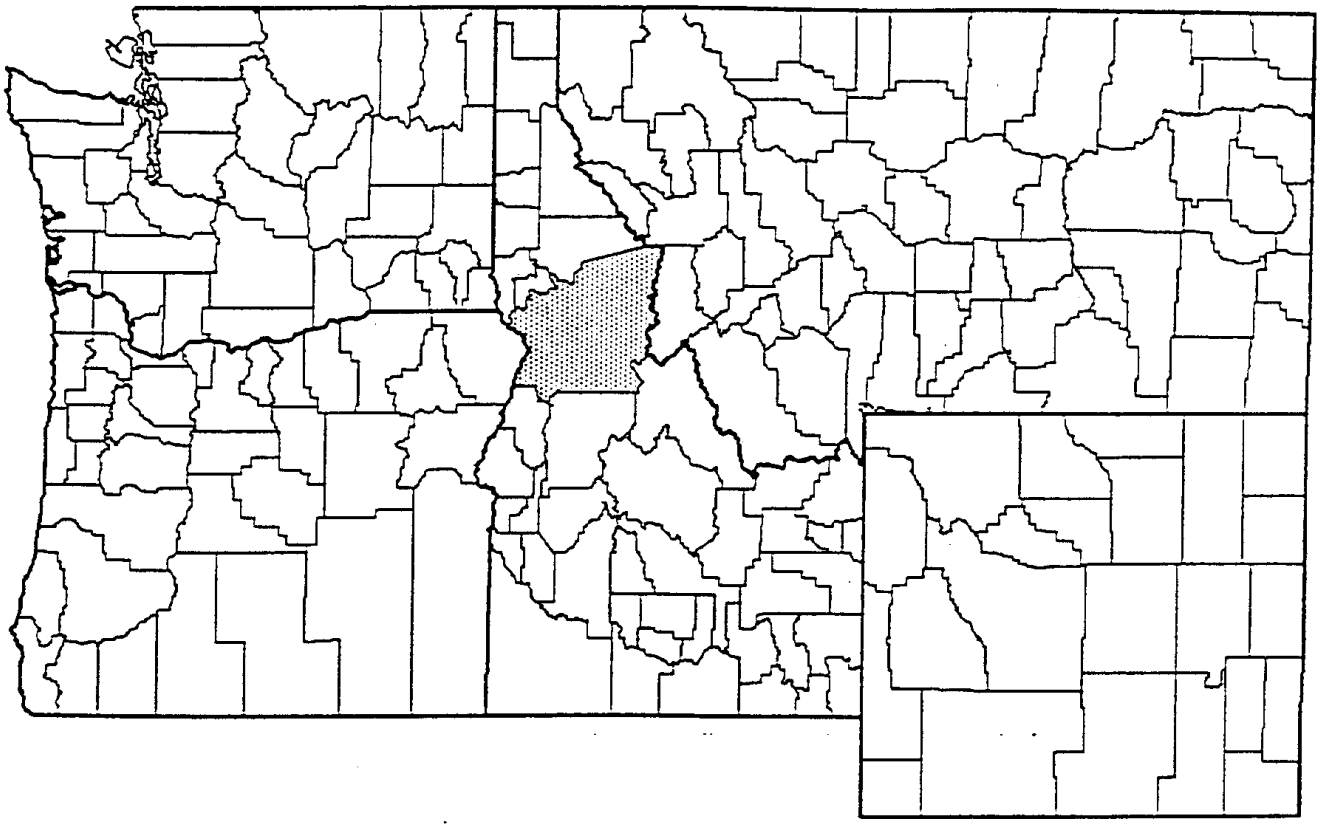


ERUCA SATIVA INCREASE IN NORTHWEST STATES

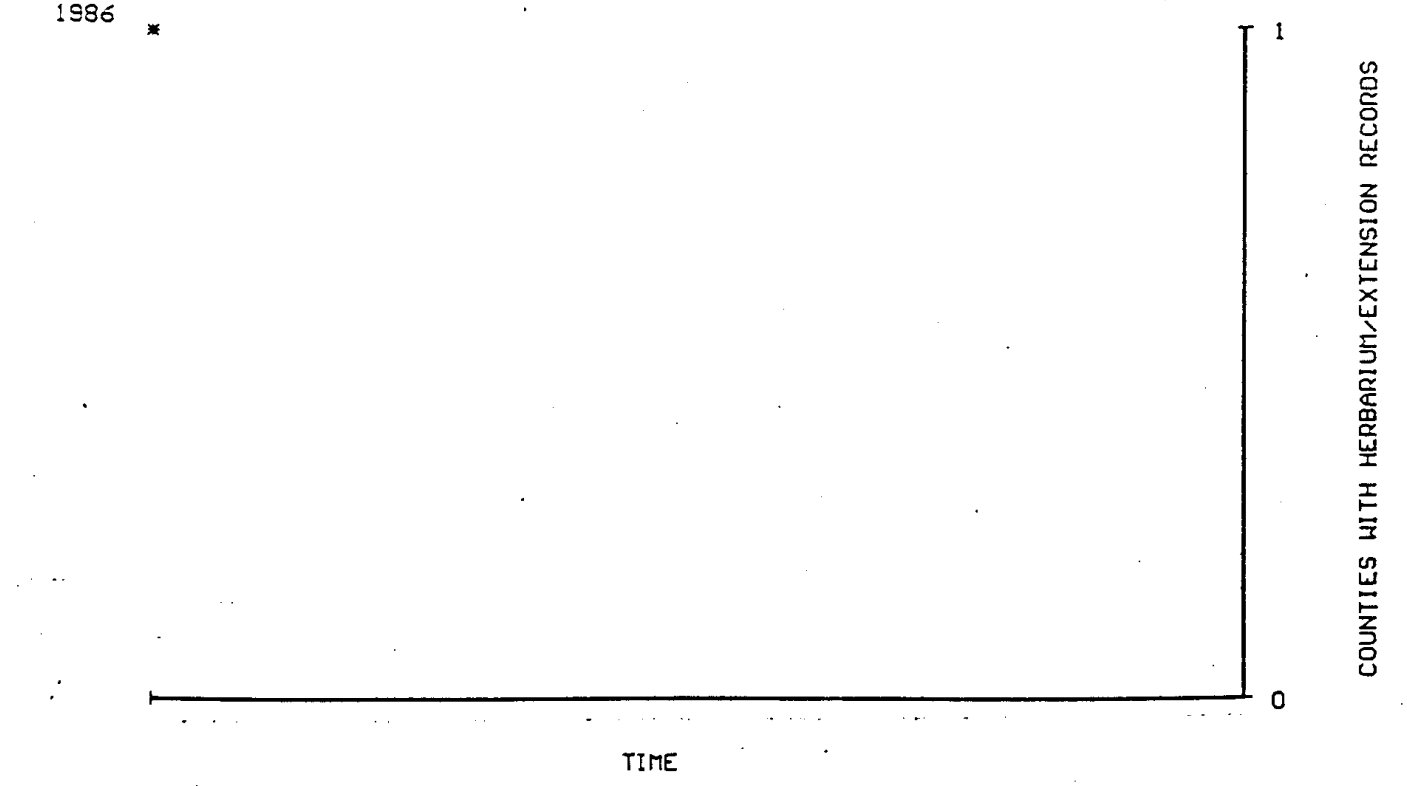
y = 1.050953 + 0.150187*x^1 - 0.002472*x^2 + 0.000019*x^3



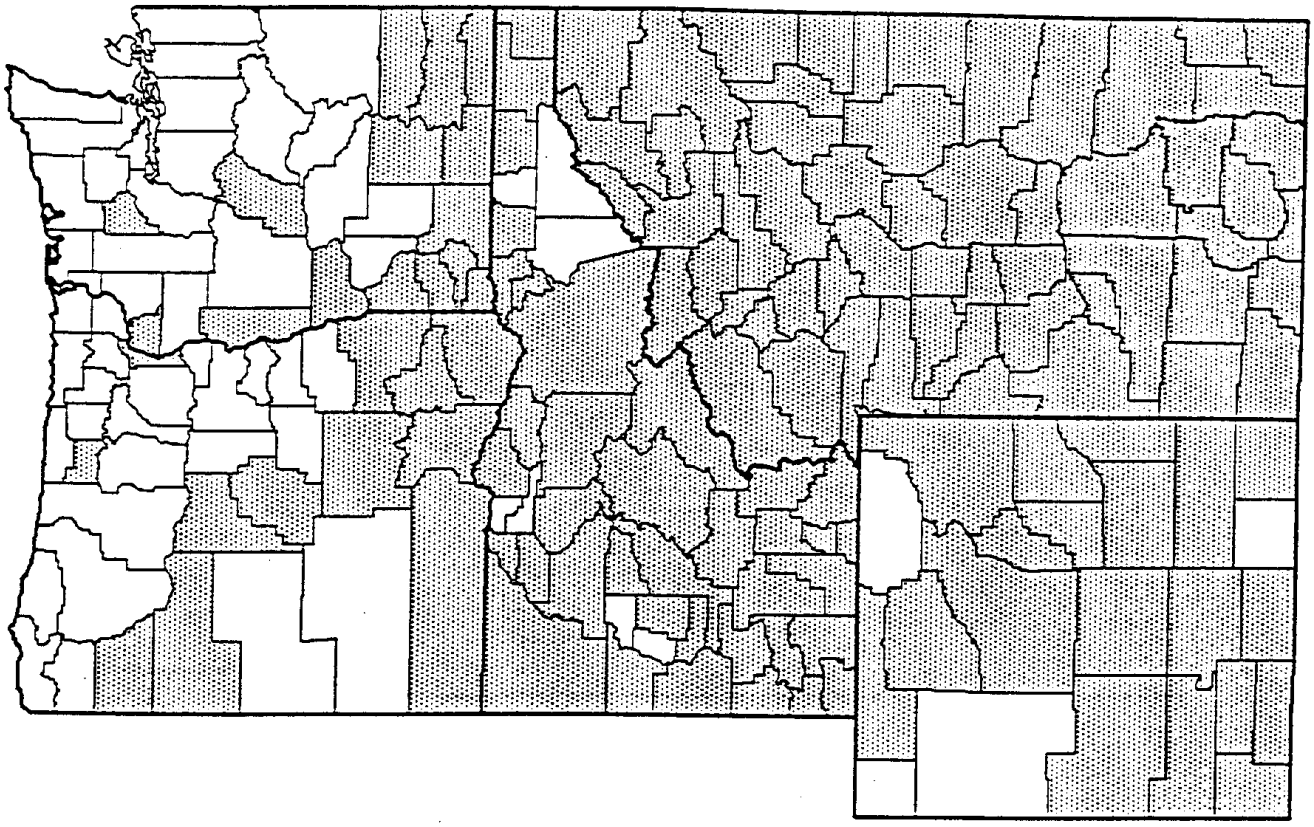
(REL 6.2) COUNTIES REPORTING EUPHORBIA DENTATA (TOOTHED SPURGE), 1875-1995.



EUPHORBIA DENTATA INCREASE IN NORTHWEST STATES

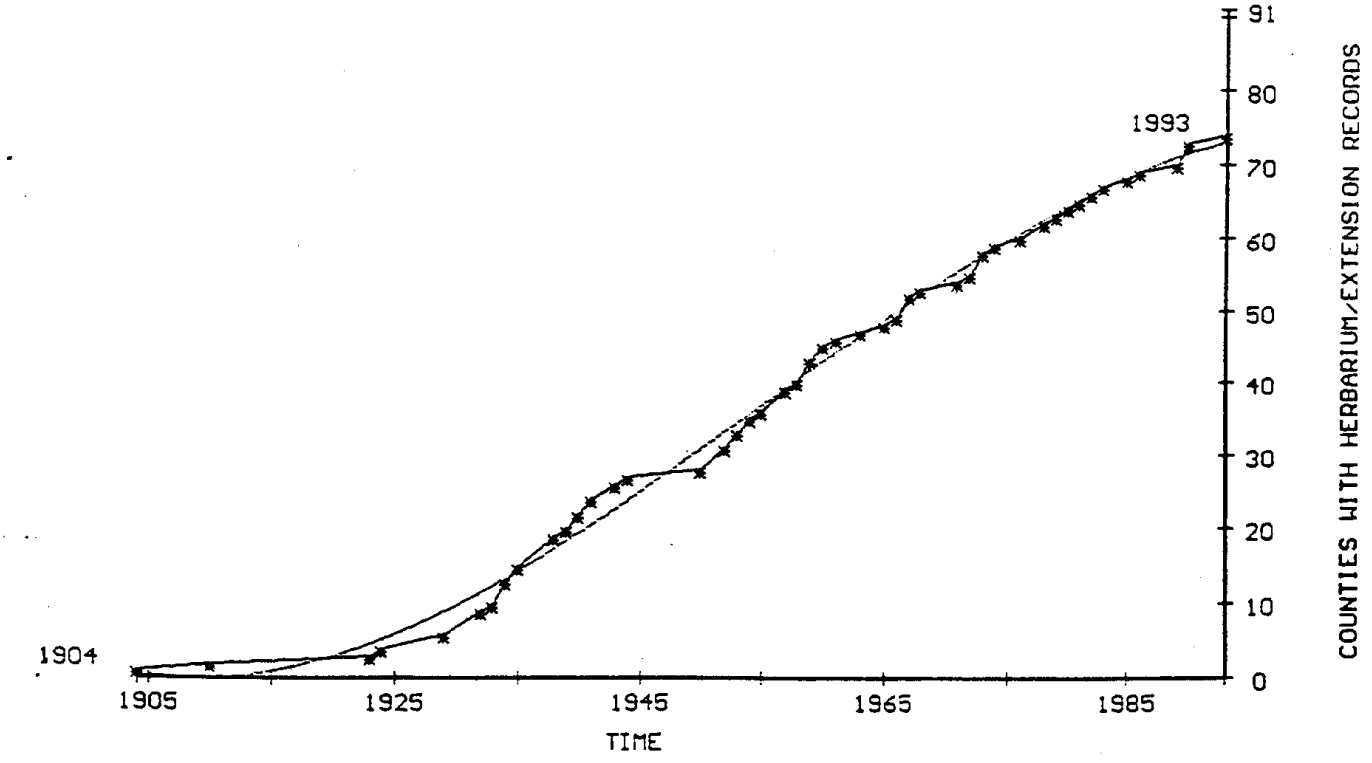


(REL 6.2) COUNTIES REPORTING EUPHORBIA ESULA (LEAFY SPURGE), 1875-1995.

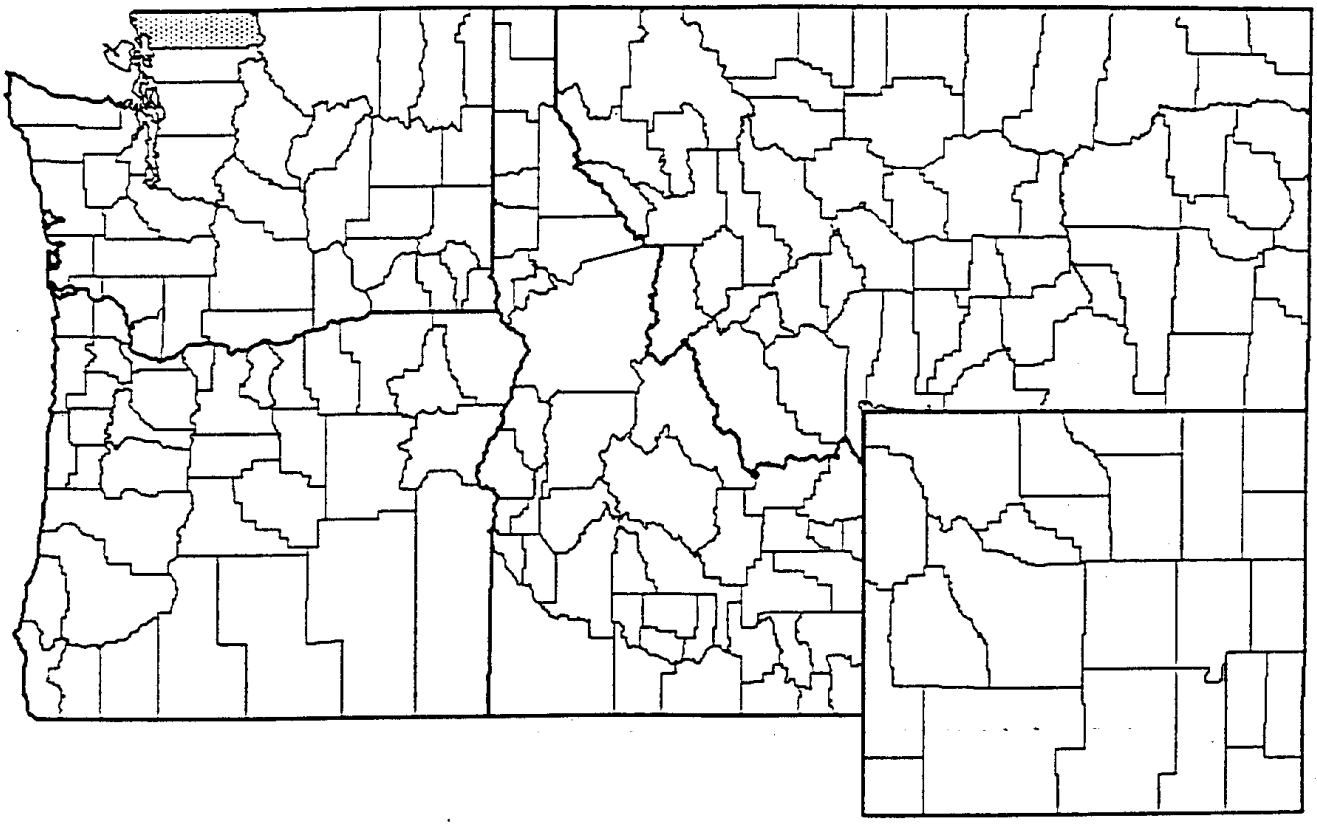


EUPHORBIA ESULA INCREASE IN NORTHWEST STATES

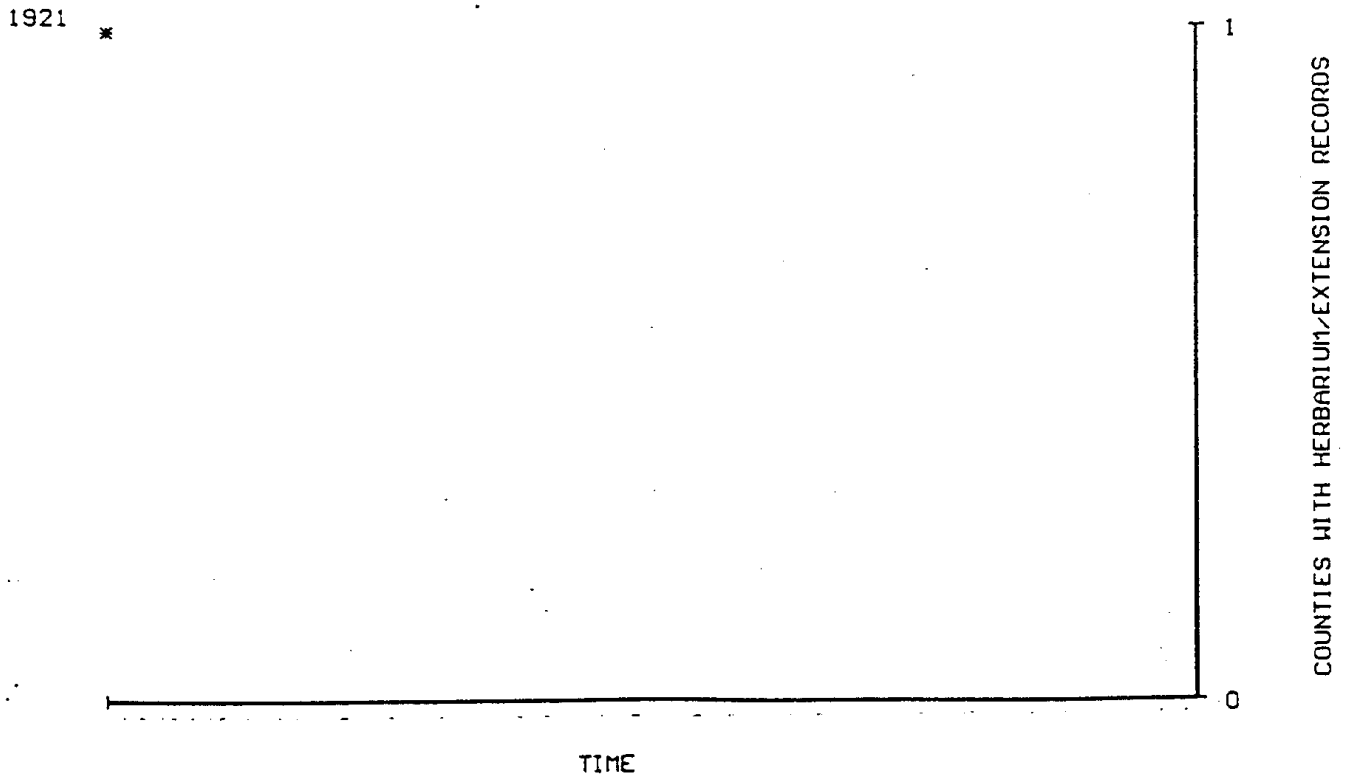
y = 0.753047 - 0.268090*x^1 + 0.028569*x^2 - 0.000185*x^3



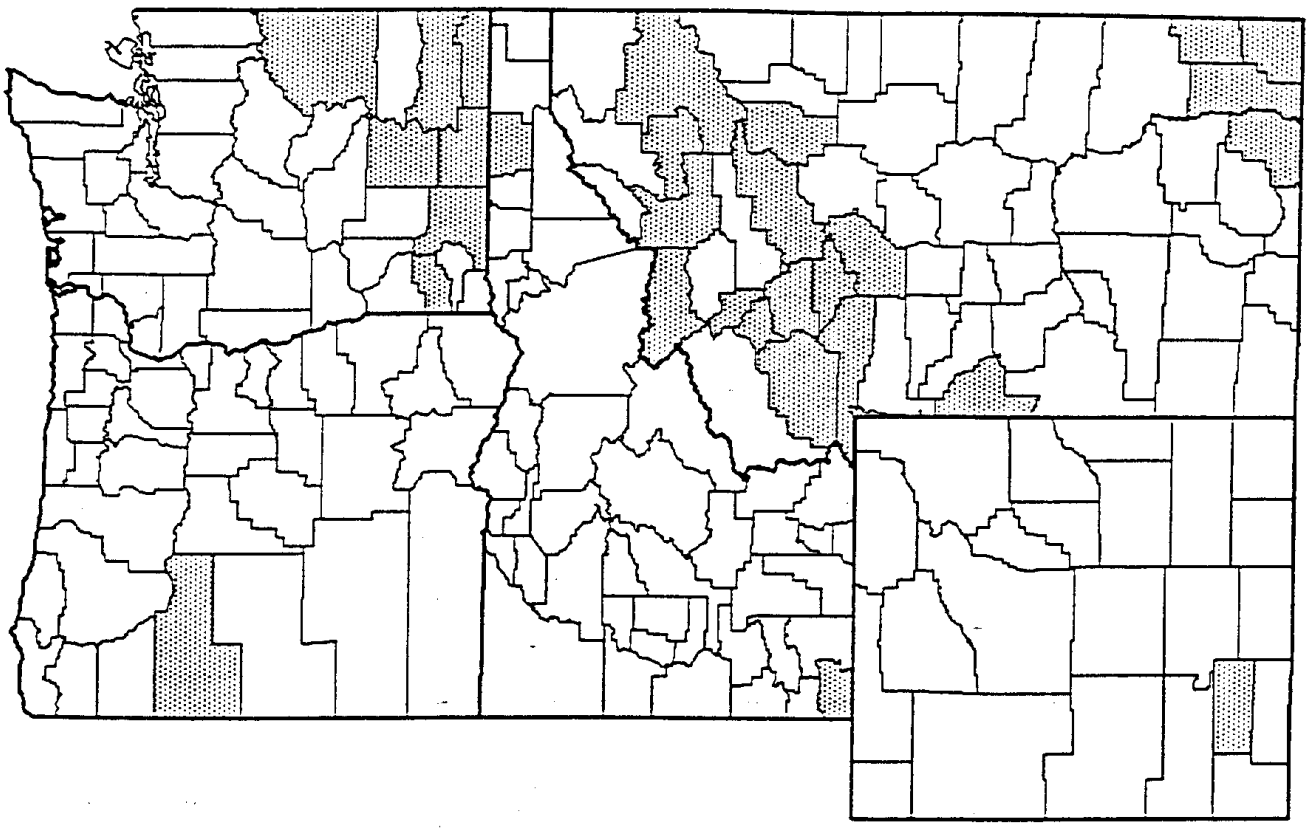
(REL 6.2) COUNTIES REPORTING GALEGA OFFICINALIS (GOAT'S RUE), 1875-1995.



GALEGA OFFICINALIS INCREASE IN NORTHWEST STATES

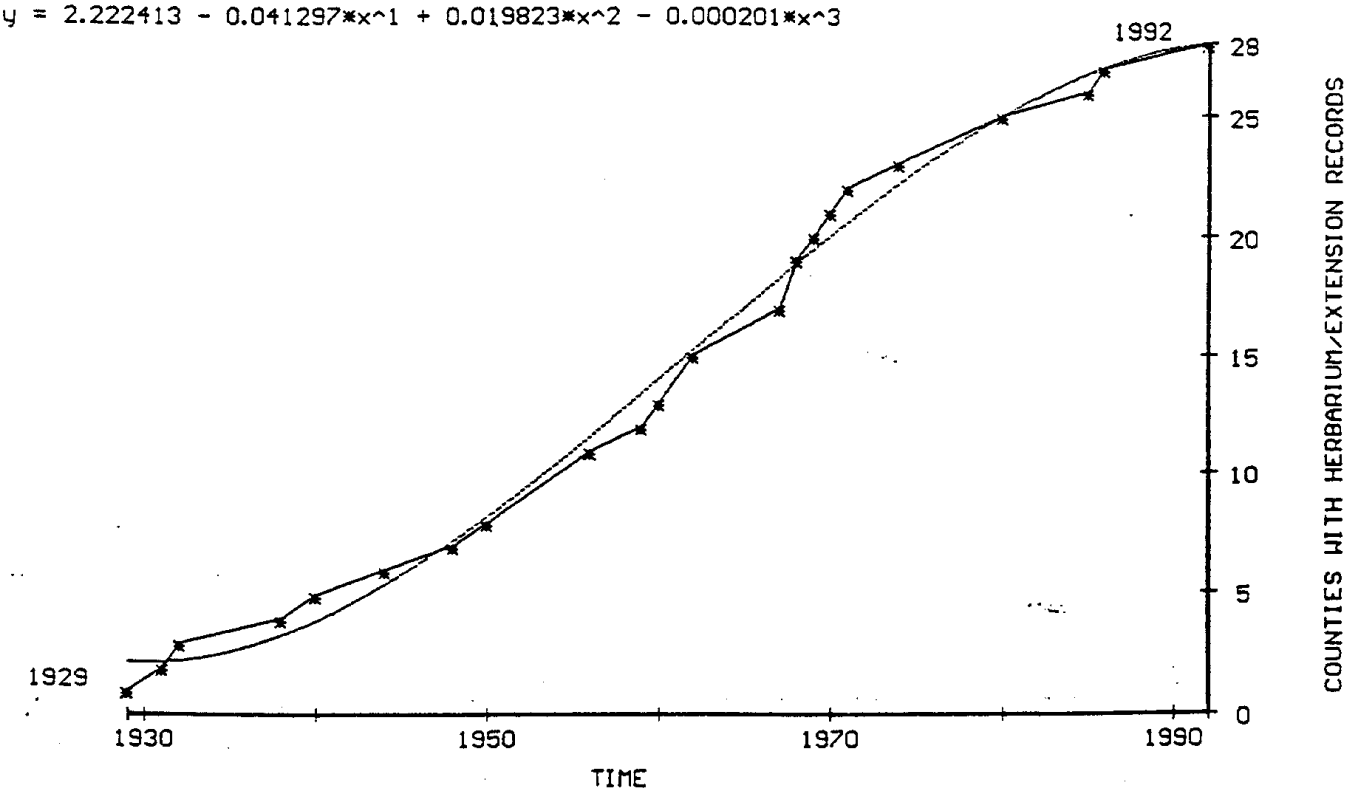


(REL 6.2) COUNTIES REPORTING GYPSOPHILA PANICULATA (BABYSBREATH), 1875-1995.

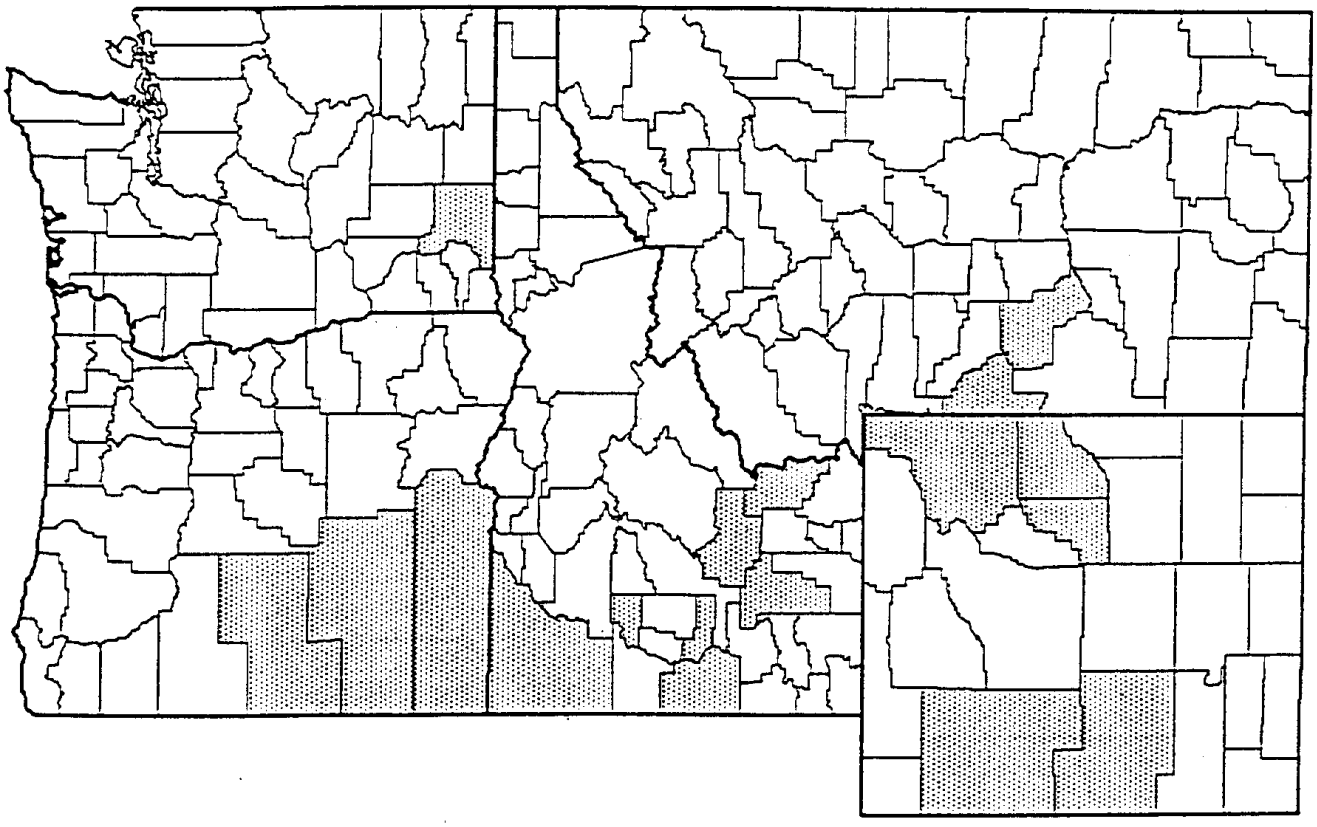


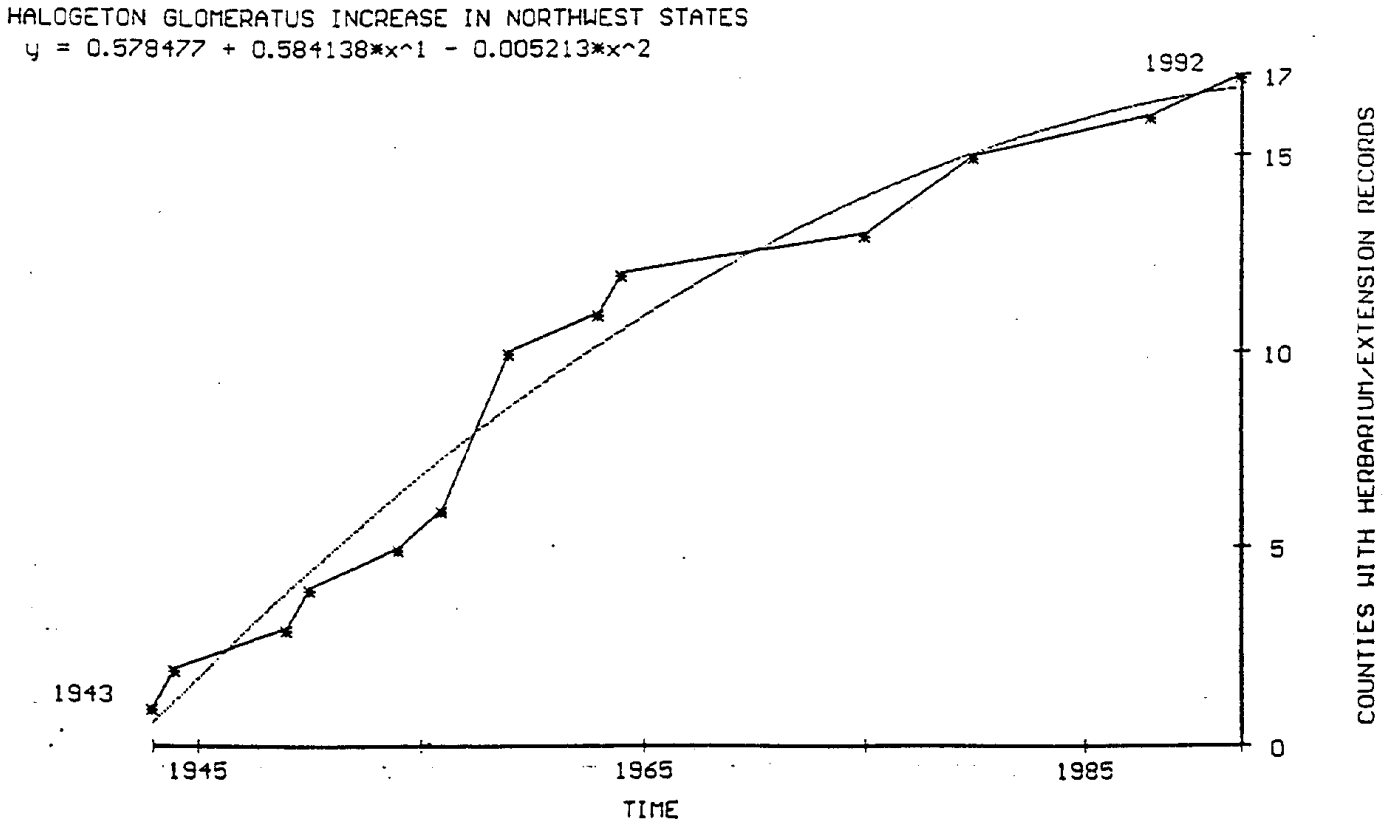
GYPSOPHILA PANICULATA INCREASE IN NORTHWEST STATES

y = 2.222413 - 0.041297*x^1 + 0.019823*x^2 - 0.000201*x^3

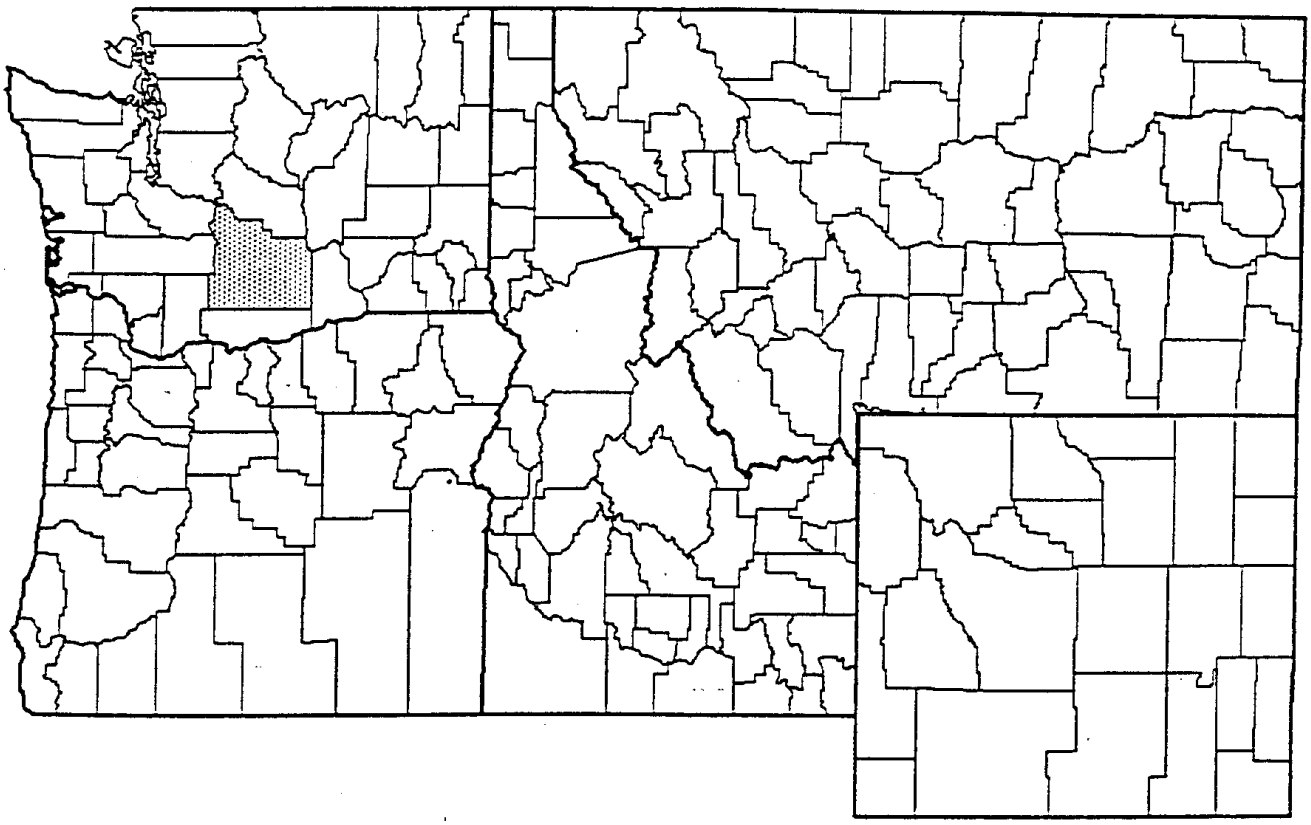


(REL 6.2) COUNTIES REPORTING HALOGETON GLOMERATUS (HALOGETON), 1875-1995.

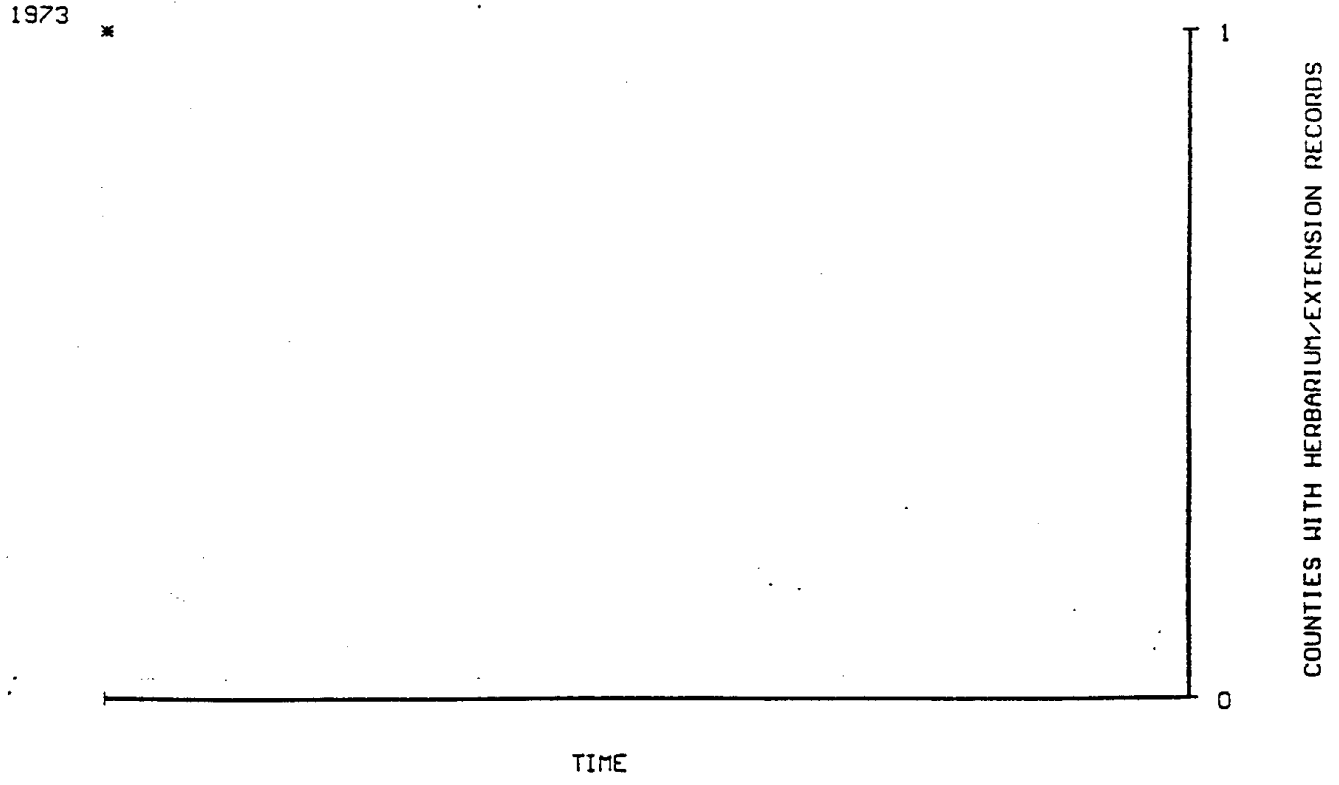




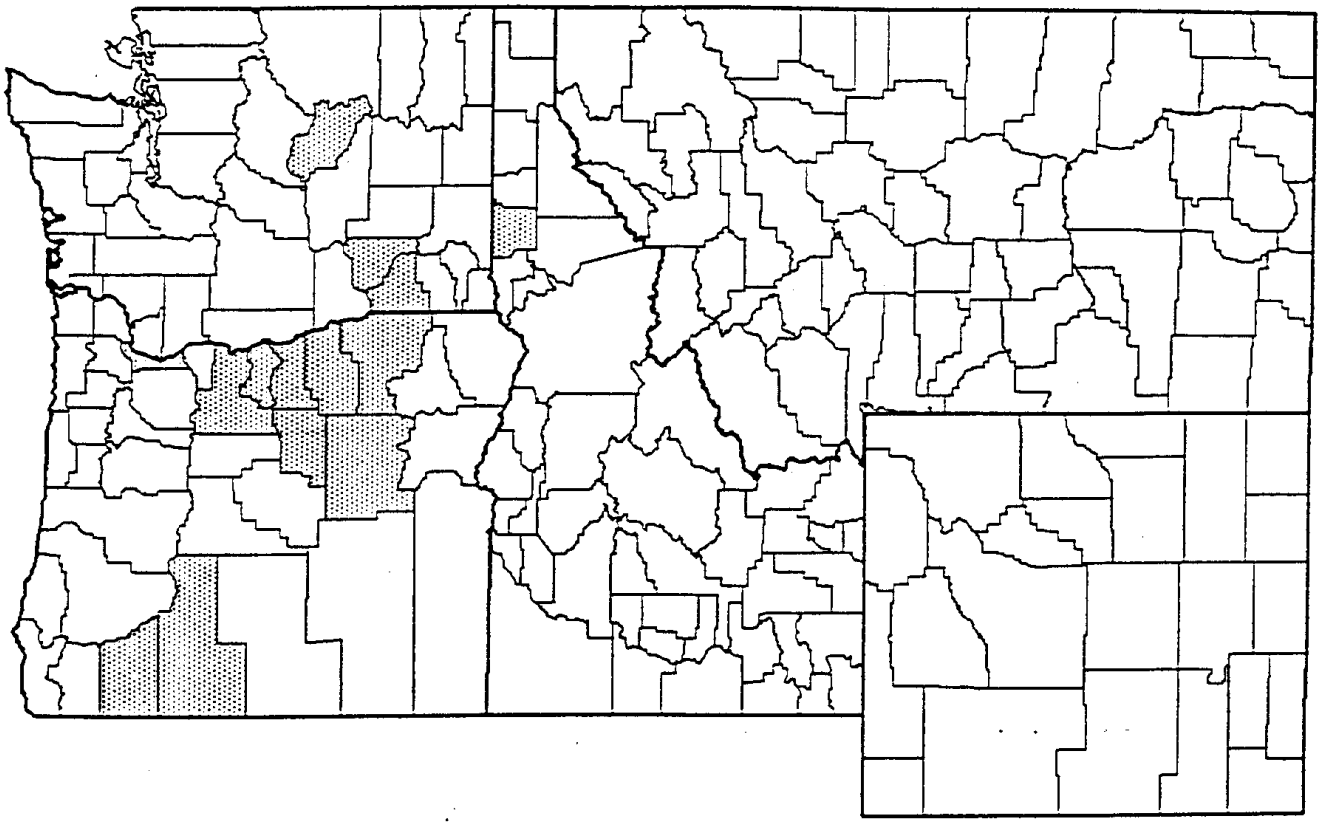
(REL 6.2) COUNTIES REPORTING HELIANTHUS CILIARIS (TEXAS BLUEWEED), 1875-1995.



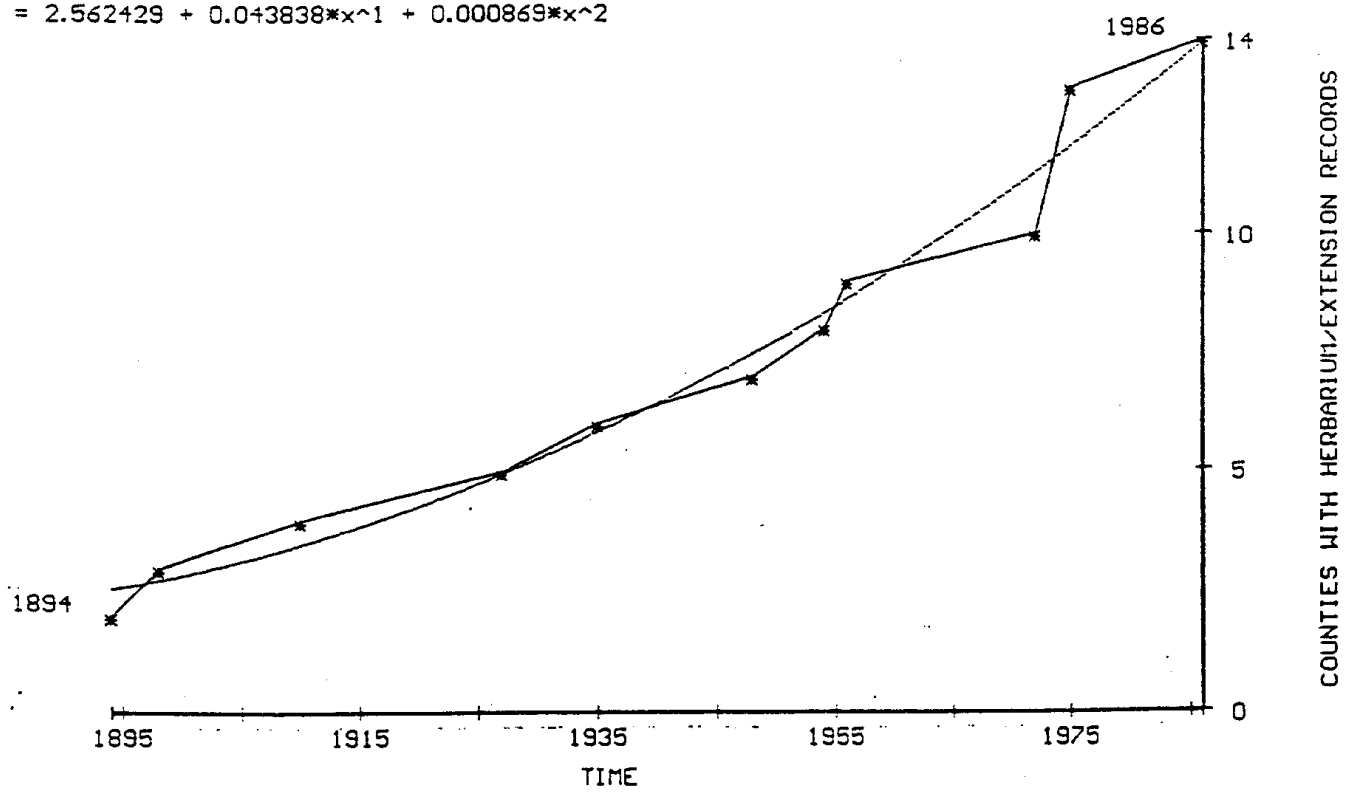
HELIANTHUS CILIARIS INCREASE IN NORTHWEST STATES



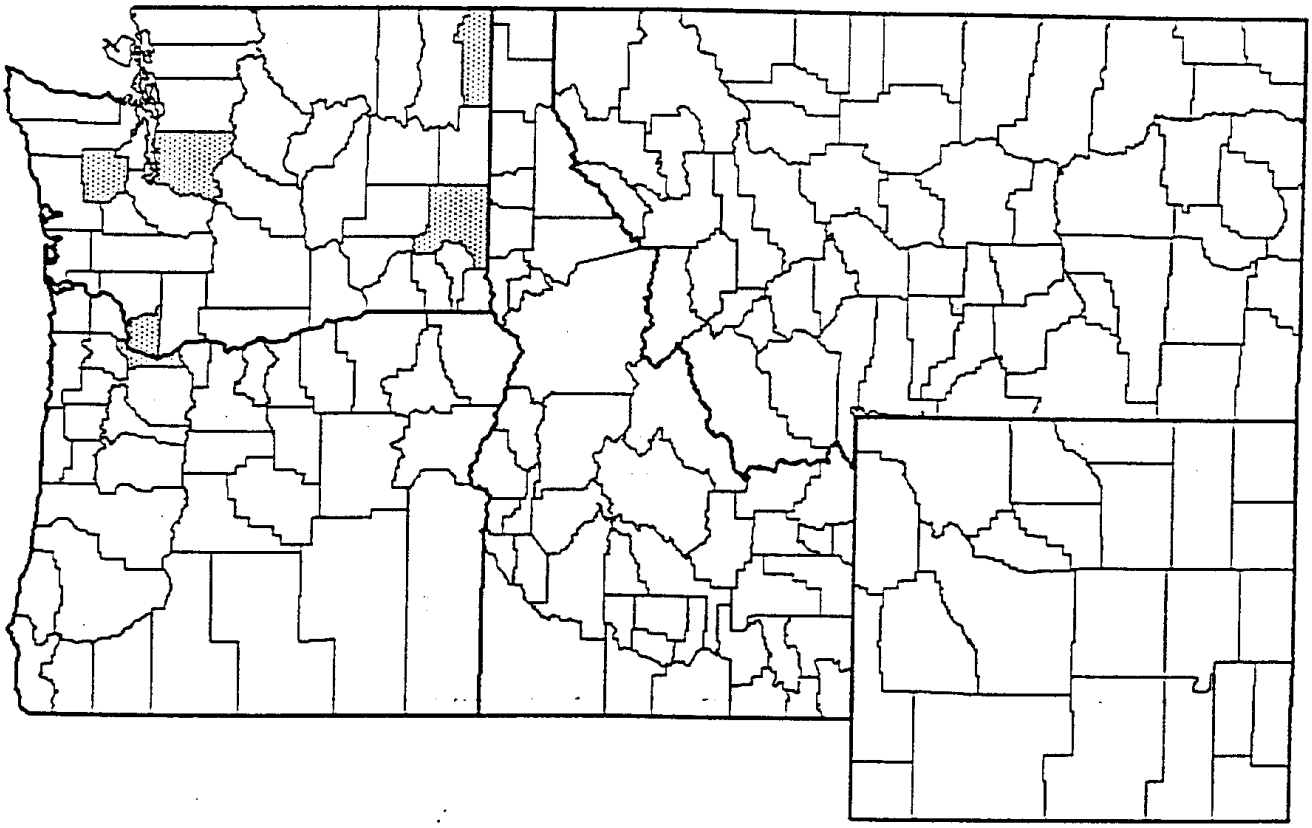
(REL 6.2) COUNTIES REPORTING HEMIZONIA PUNGENS (SPIKEWEED), 1875-1995.



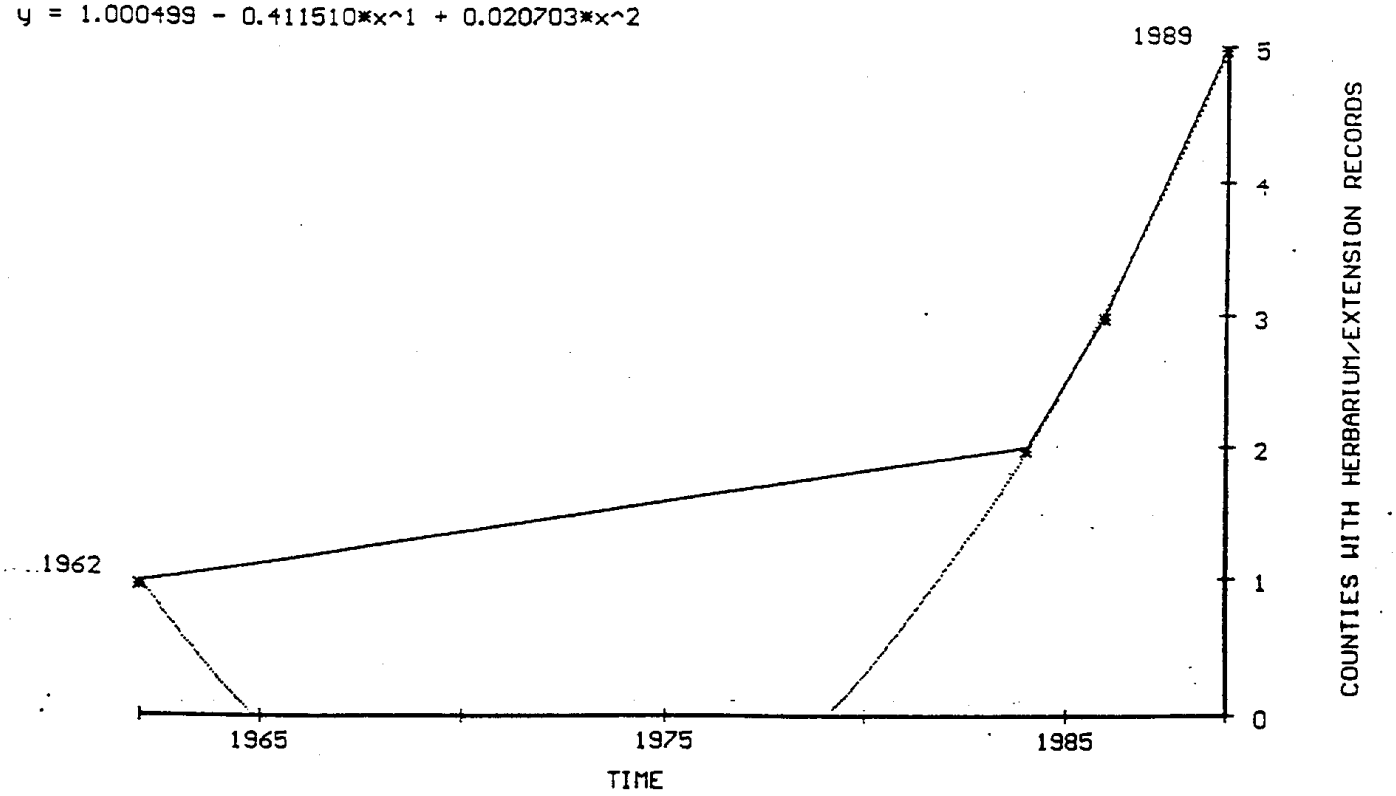
HEMIZONIA PUNGENS INCREASE IN NORTHWEST STATES
y = 2.562429 + 0.043838*x^1 + 0.000869*x^2



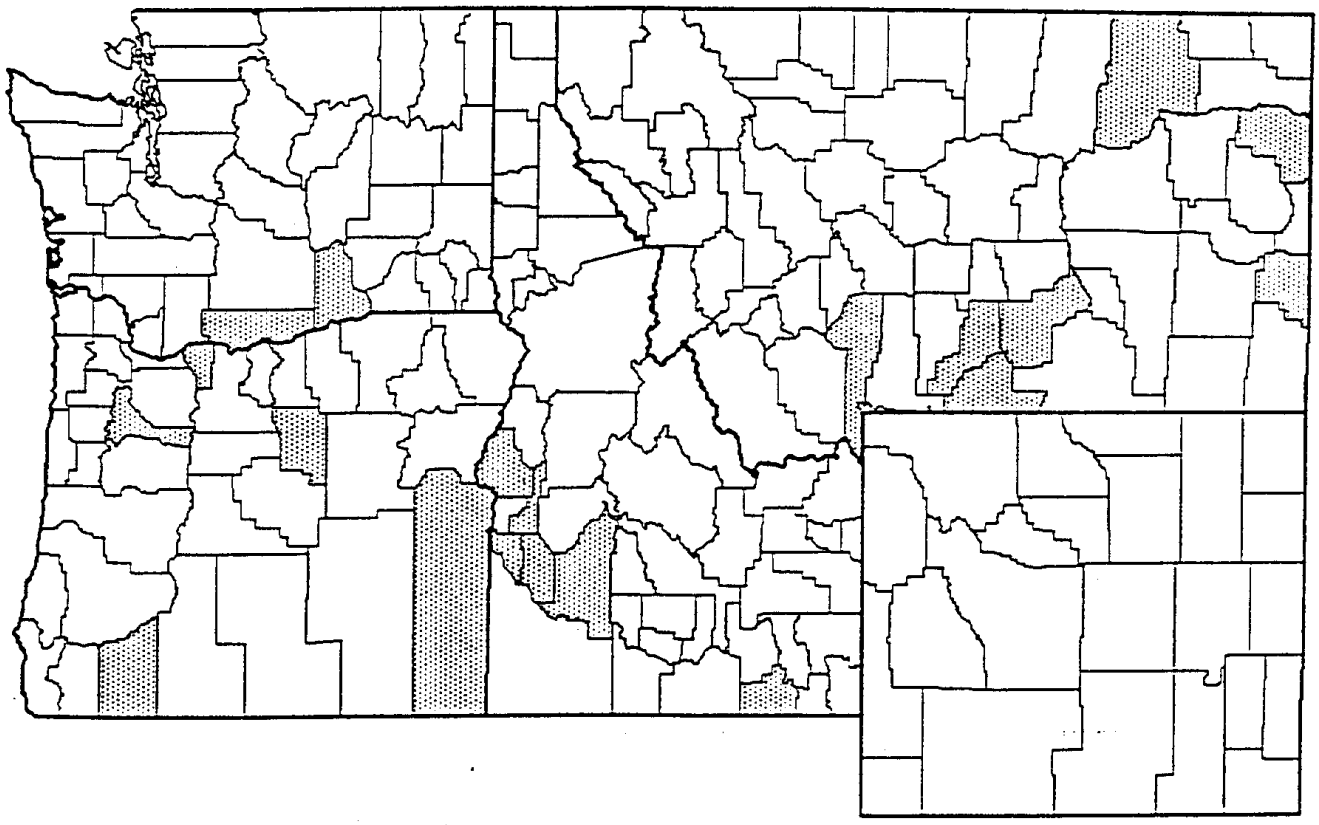
(REL 6.2) COUNTIES REPORTING HERACLEUM MANTEGAZZIANUM (GIANT HOGWEED), 1875-1995.



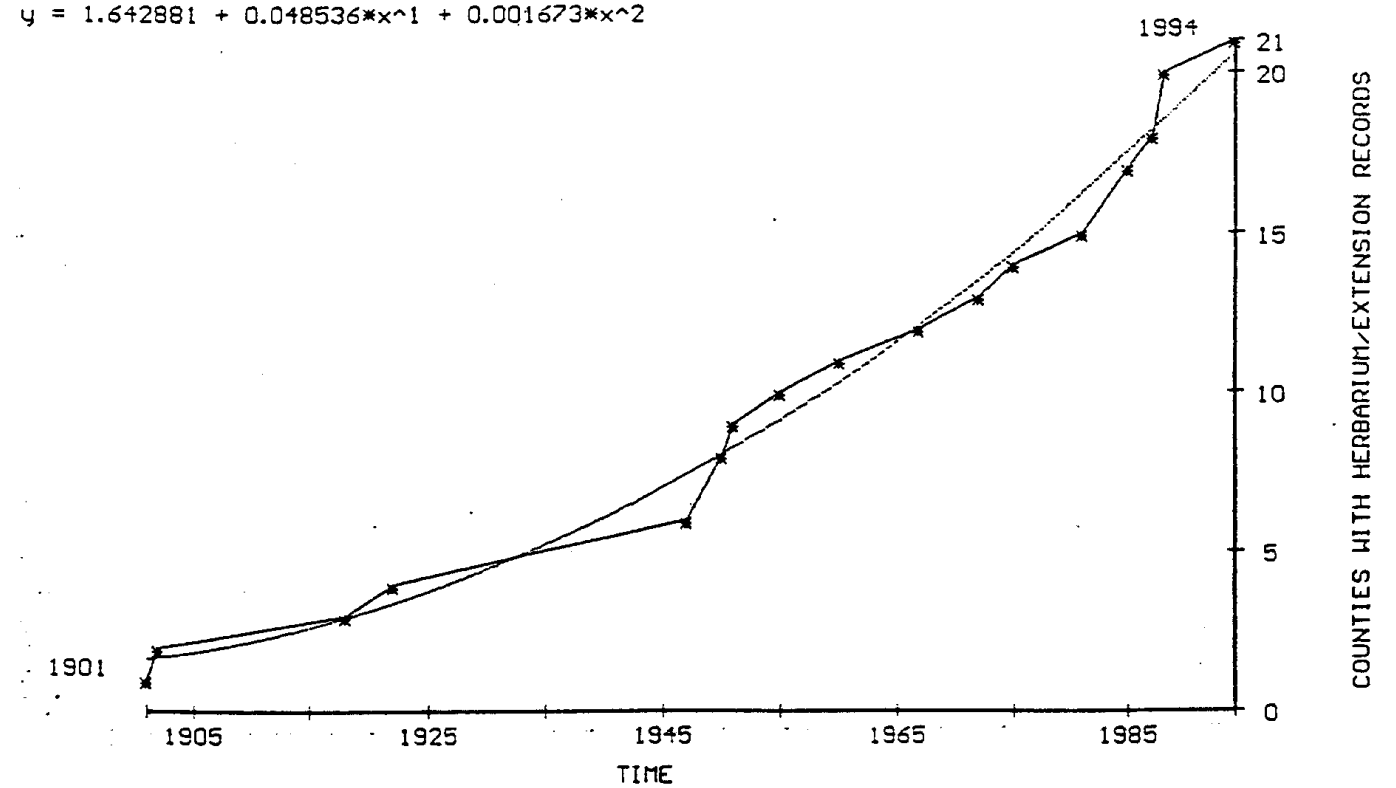
HERACLEUM MANTEGAZZIANUM INCREASE IN NORTHWEST STATES
y = 1.000499 - 0.411510*x^1 + 0.020703*x^2



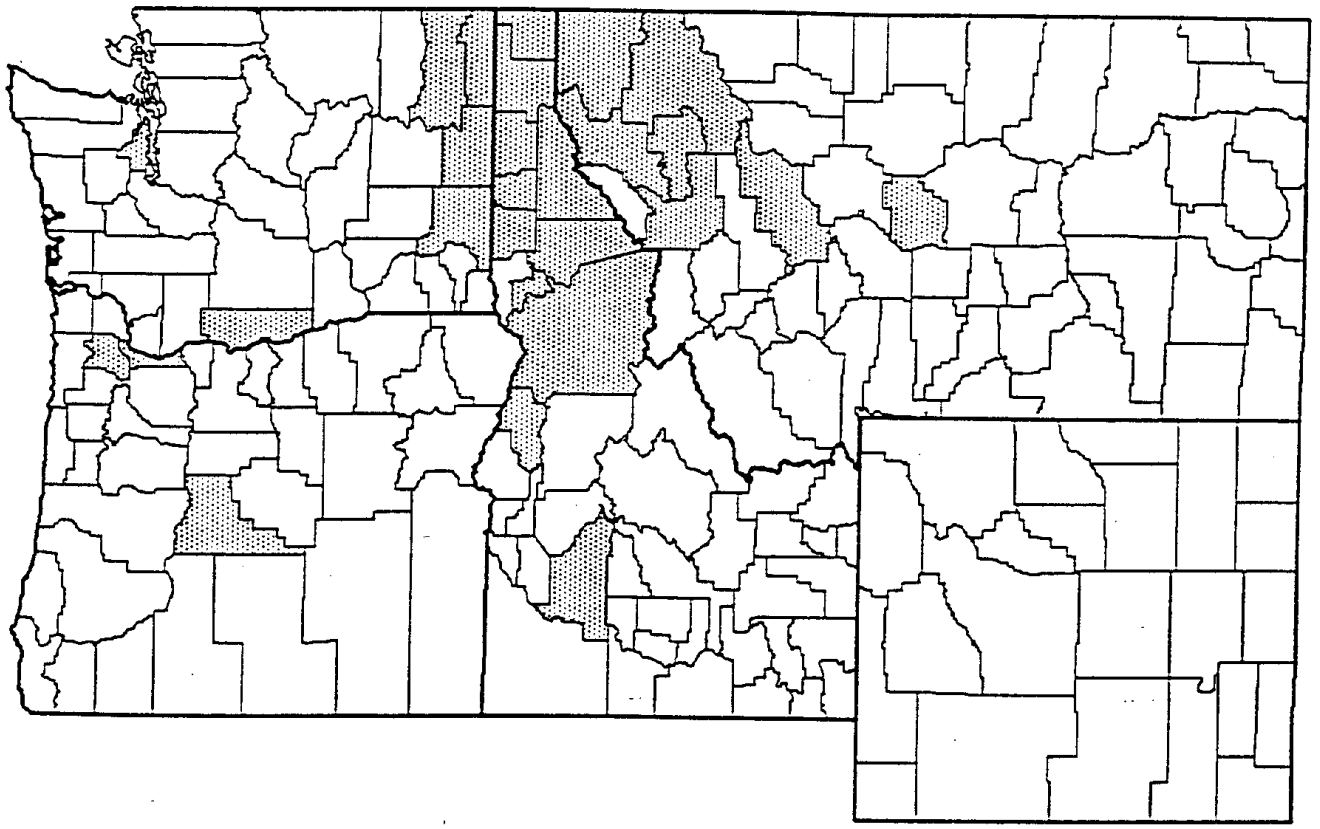
(REL 6.2) COUNTIES REPORTING HIBISCUS TRIONUM (VENICE MALLOW), 1875-1995.



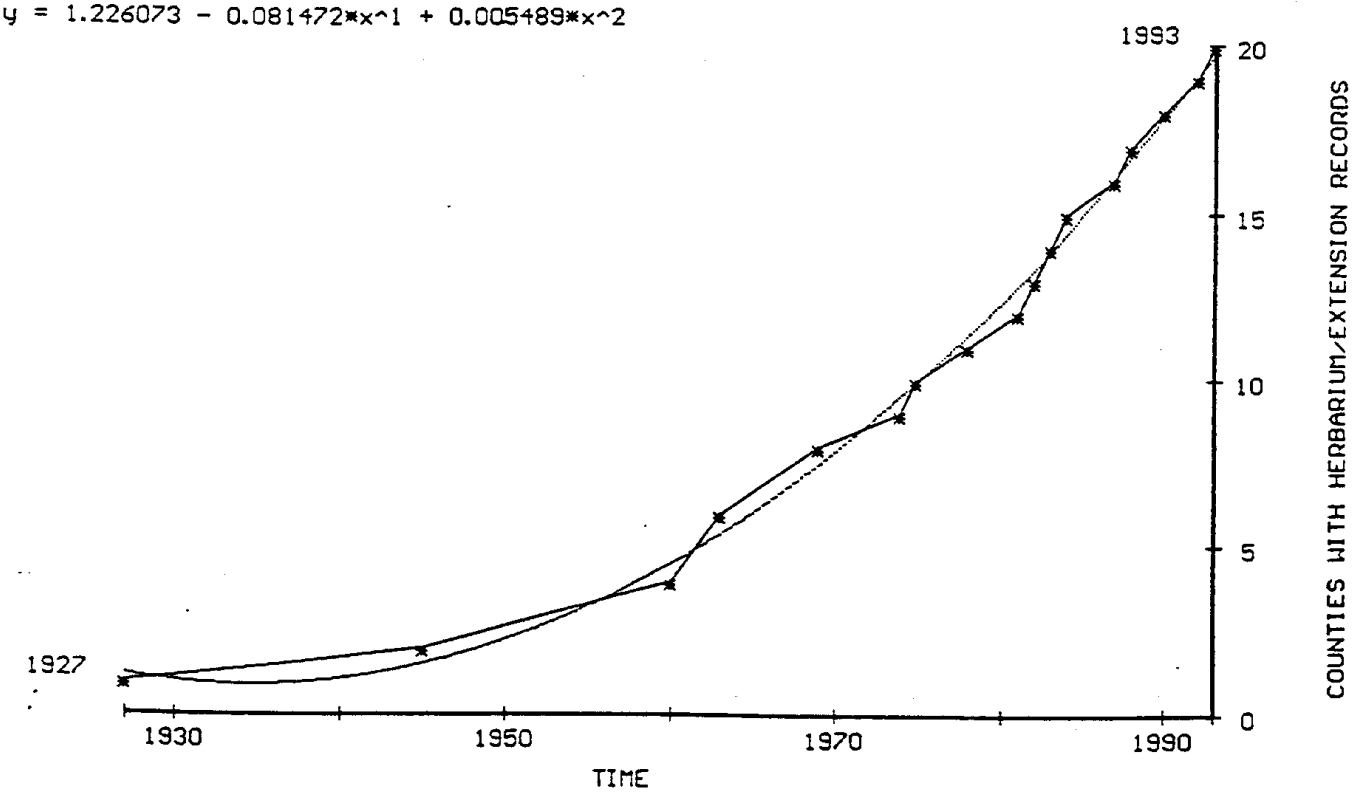
HIBISCUS TRIONUM INCREASE IN NORTHWEST STATES
y = 1.642881 + 0.048536*x^1 + 0.001673*x^2



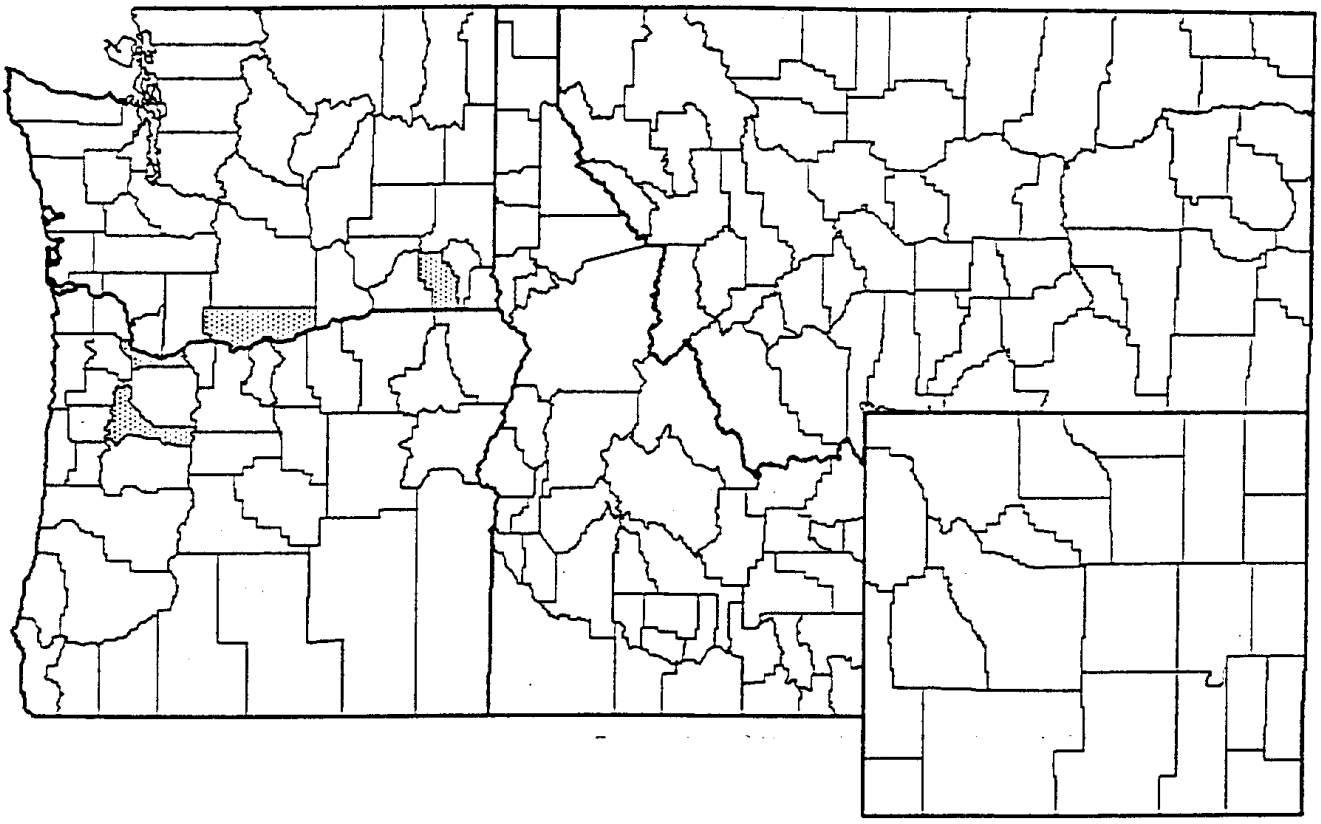
(REL 6.2) COUNTIES REPORTING HIERACIUM AURANTIACUM (ORANGE HAWKWEED), 1875-1995.



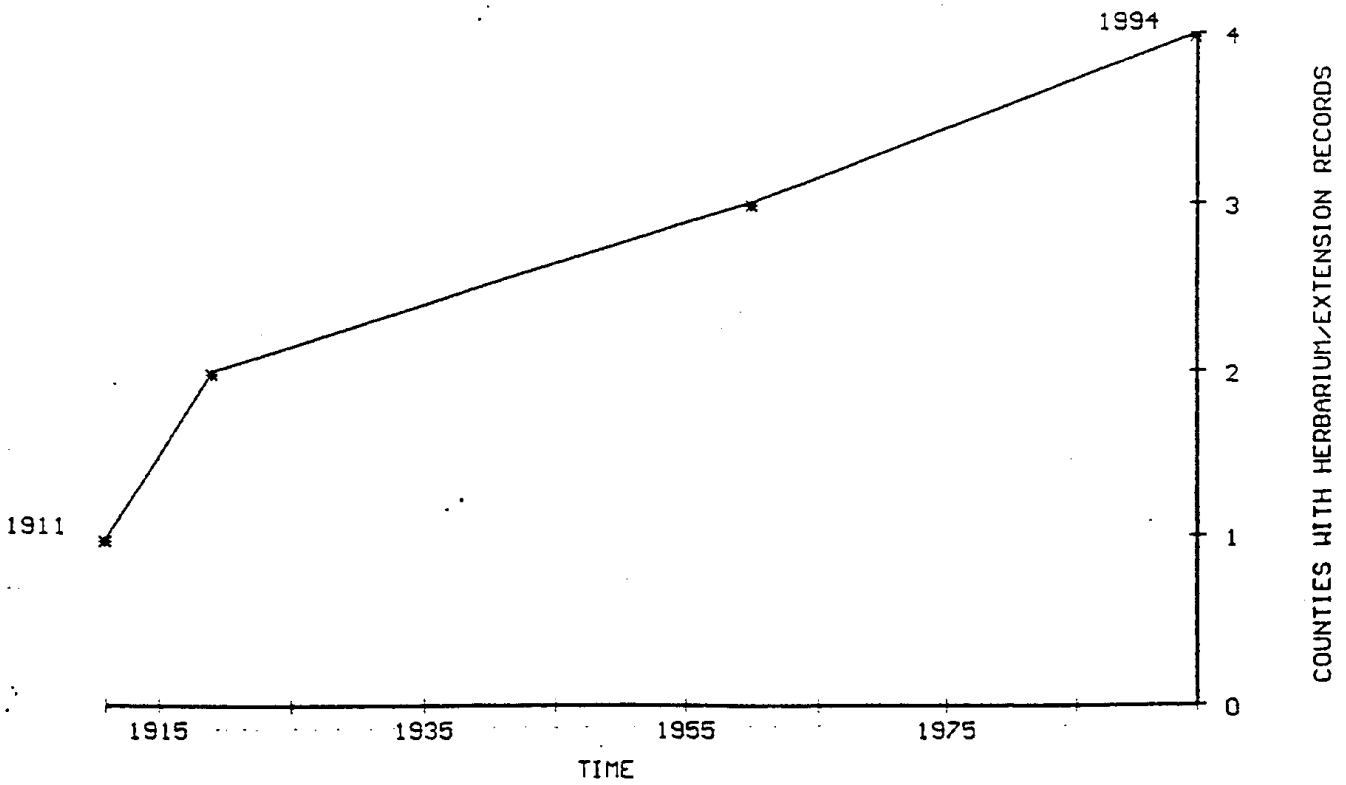
HIERACIUM AURANTIACUM INCREASE IN NORTHWEST STATES
y = 1.226073 - 0.081472*x^1 + 0.005489*x^2



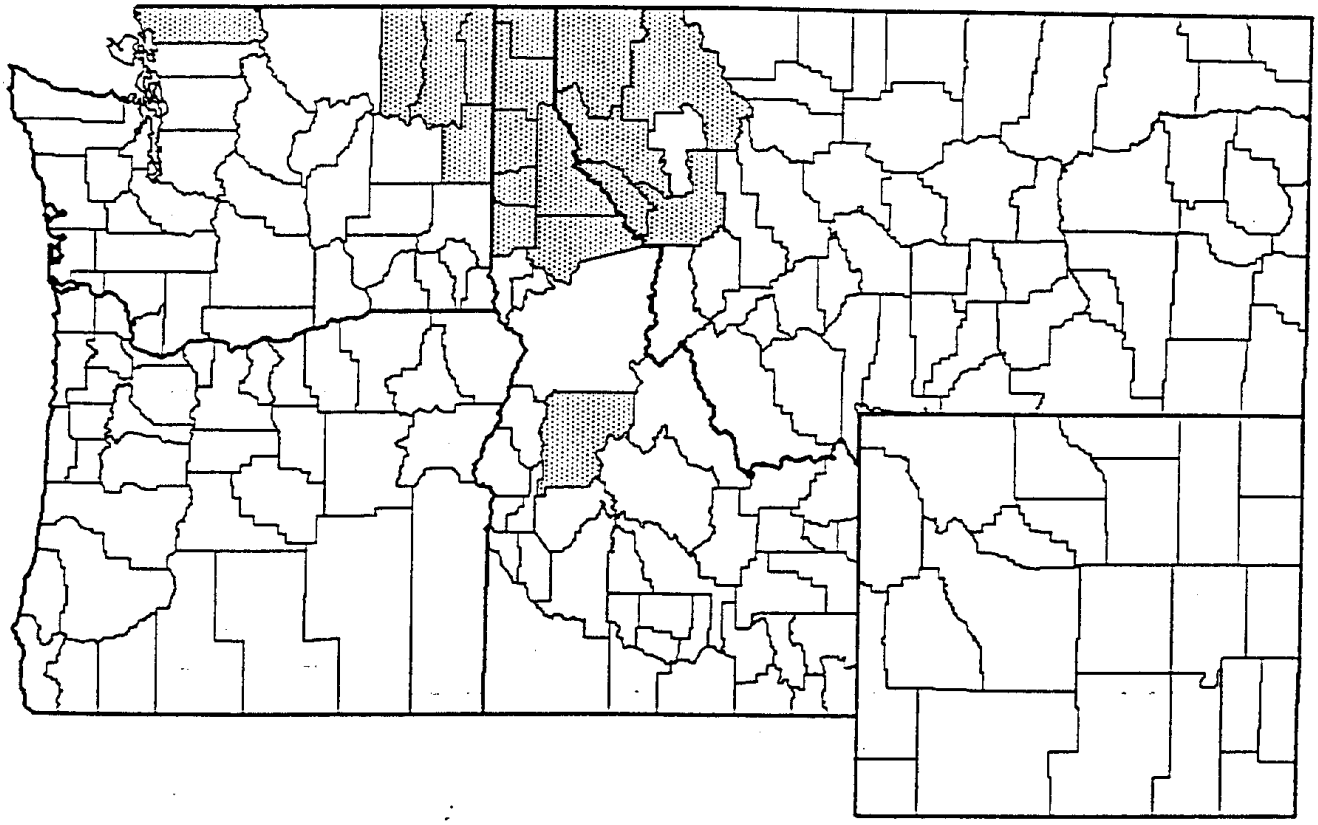
(REL 6.2) COUNTIES REPORTING HIERACIUM PILOSELLA (MOUSE EAR HAWKWEED), 1875-1995.



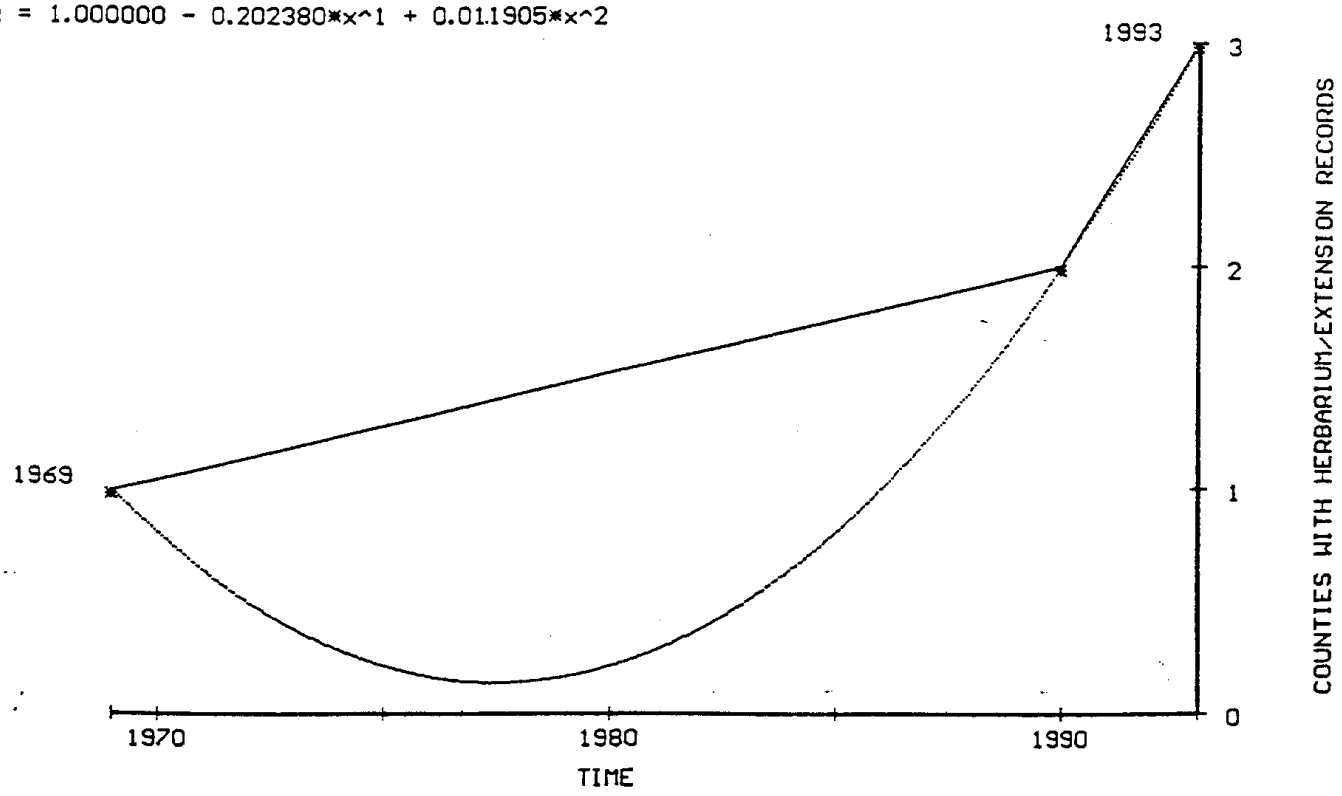
HIERACIUM PILOSELLA INCREASE IN NORTHWEST STATES



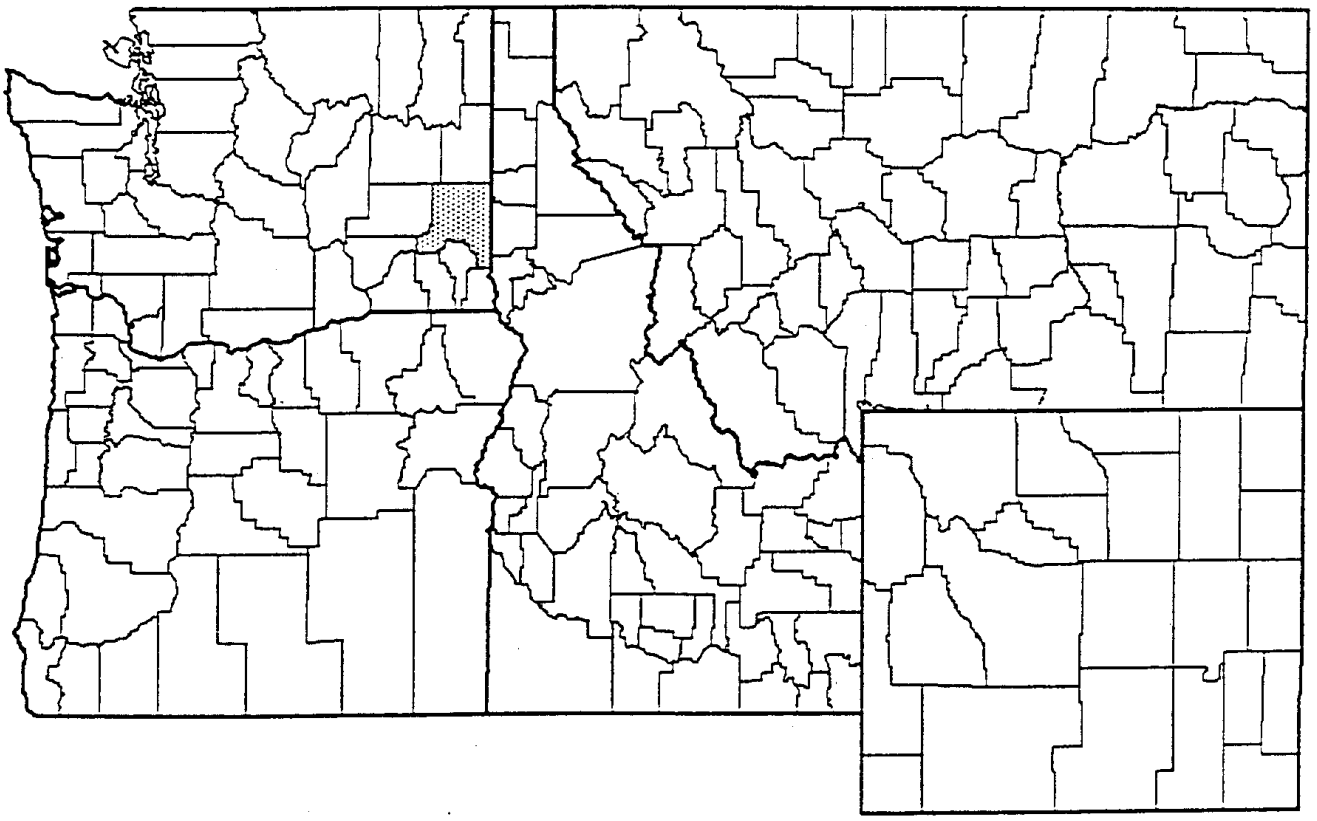
(REL 6.2) COUNTIES REPORTING HIERACIUM PRATENSE (YELLOW HAWKWEED), 1875-1995.



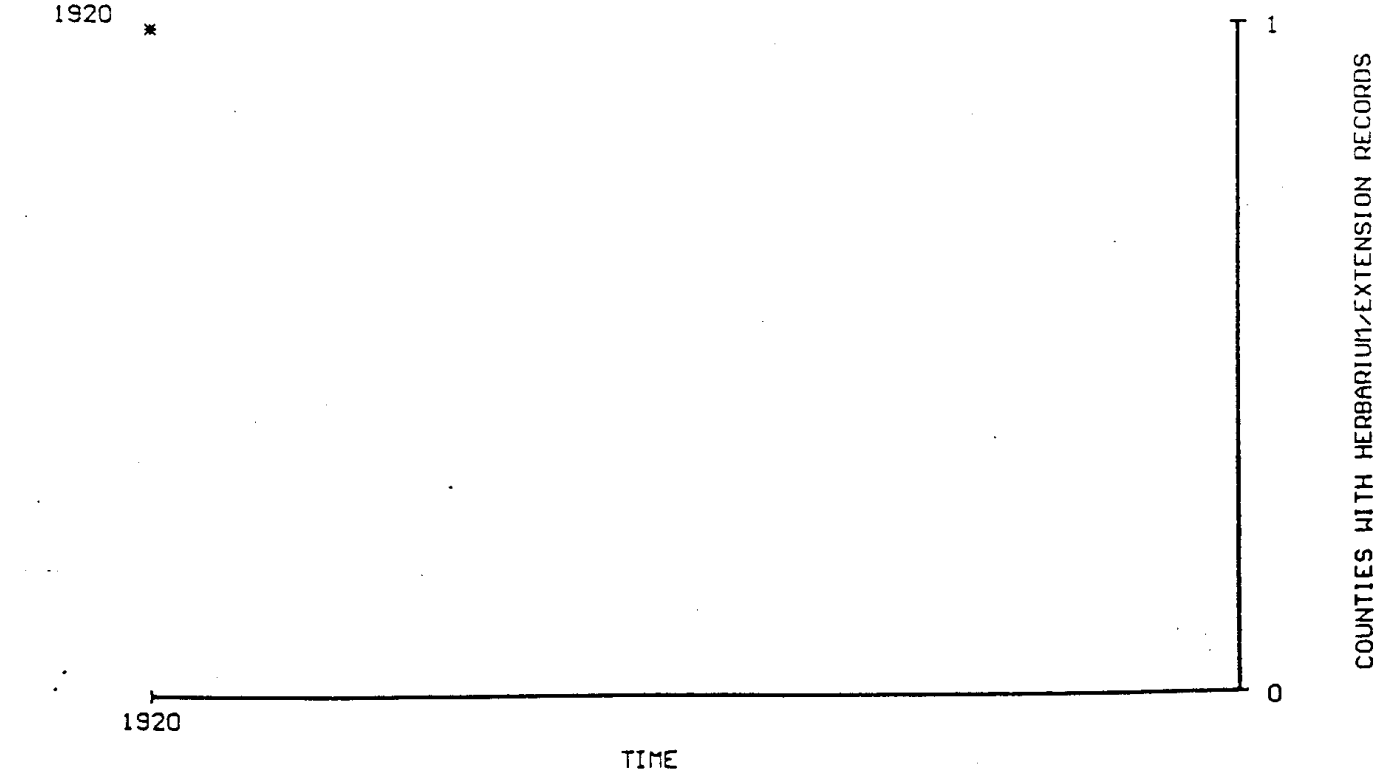
HIERACIUM PRATENSE INCREASE IN NORTHWEST STATES
y = 1.000000 - 0.202380*x^1 + 0.011905*x^2



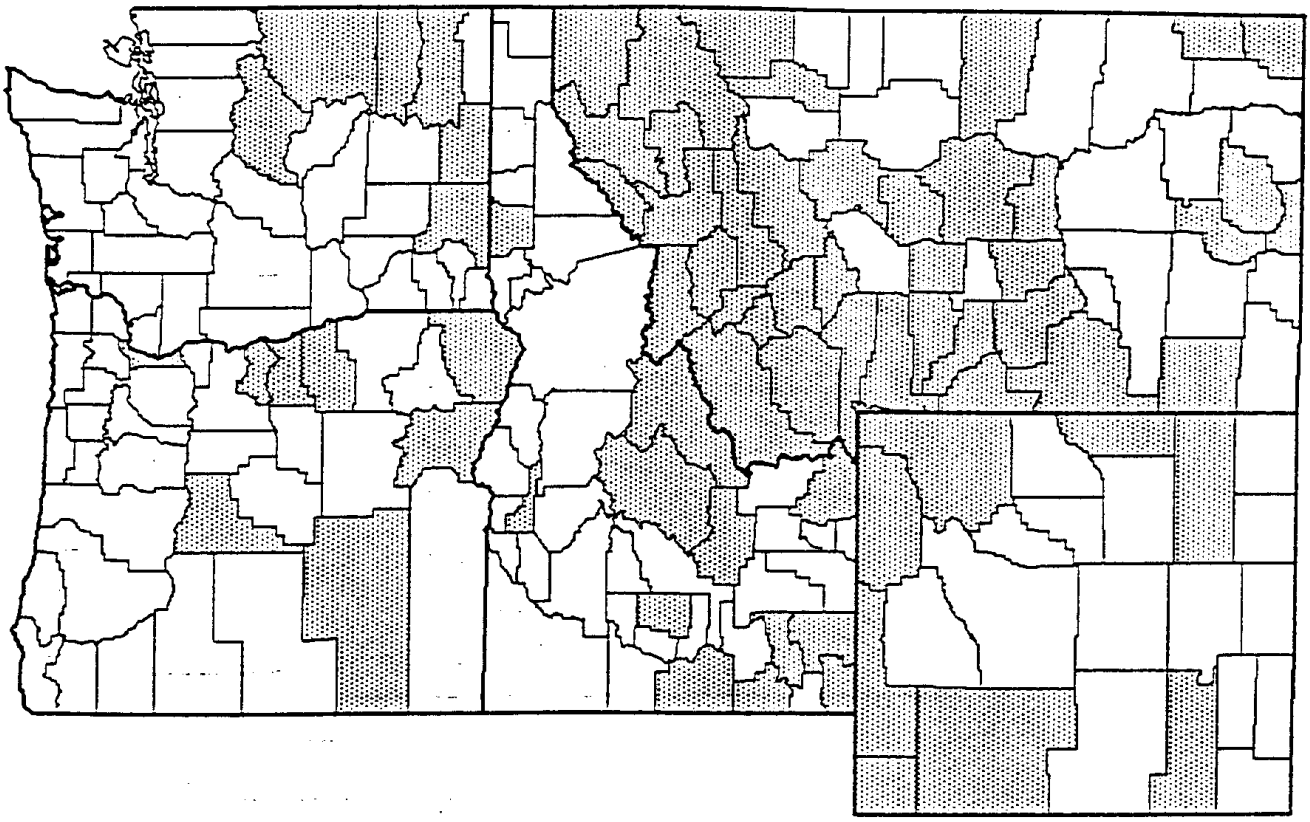
(REL 6.2) COUNTIES REPORTING HYGROPHILA POLYSPERMA (MANY-SEEDED HYDRILLA), 1875-1995.



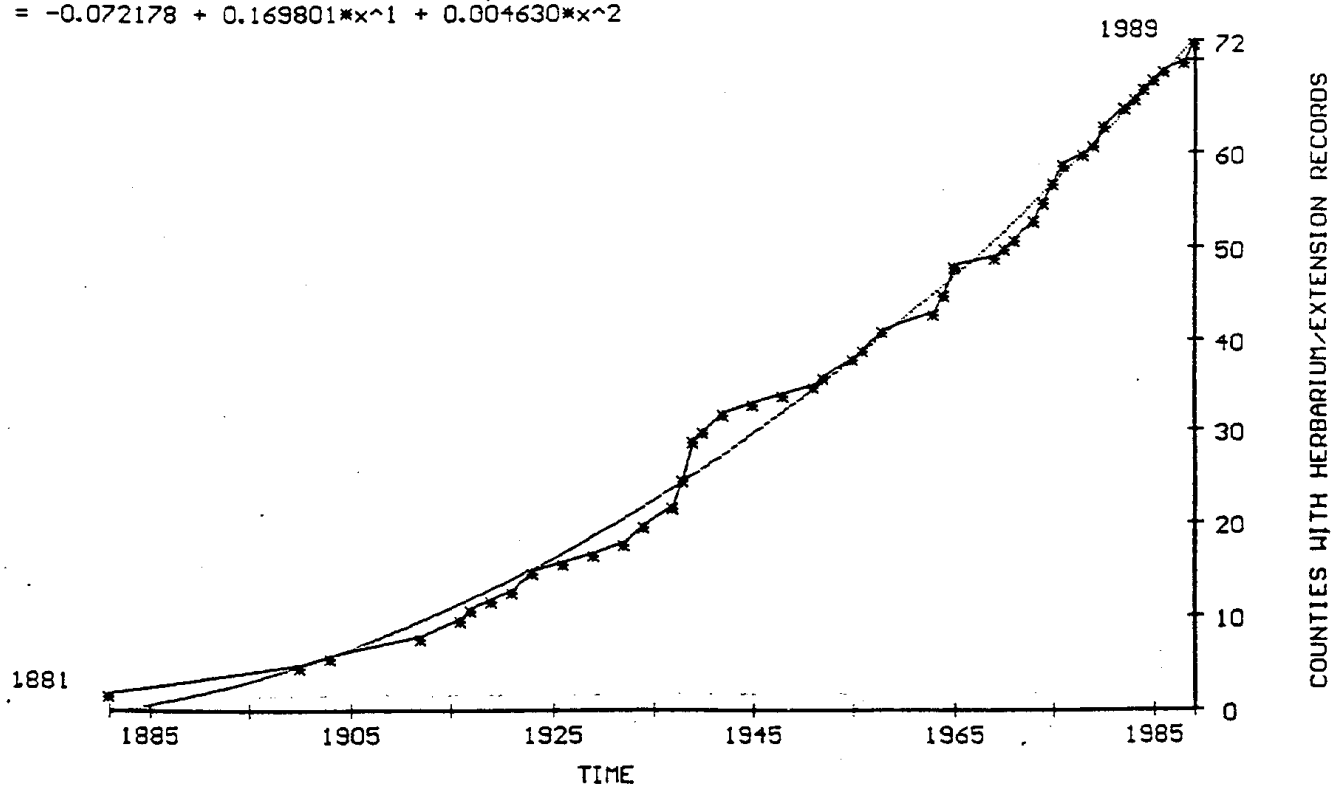
HYGROPHILA POLYSPERMA INCREASE IN NORTHWEST STATES



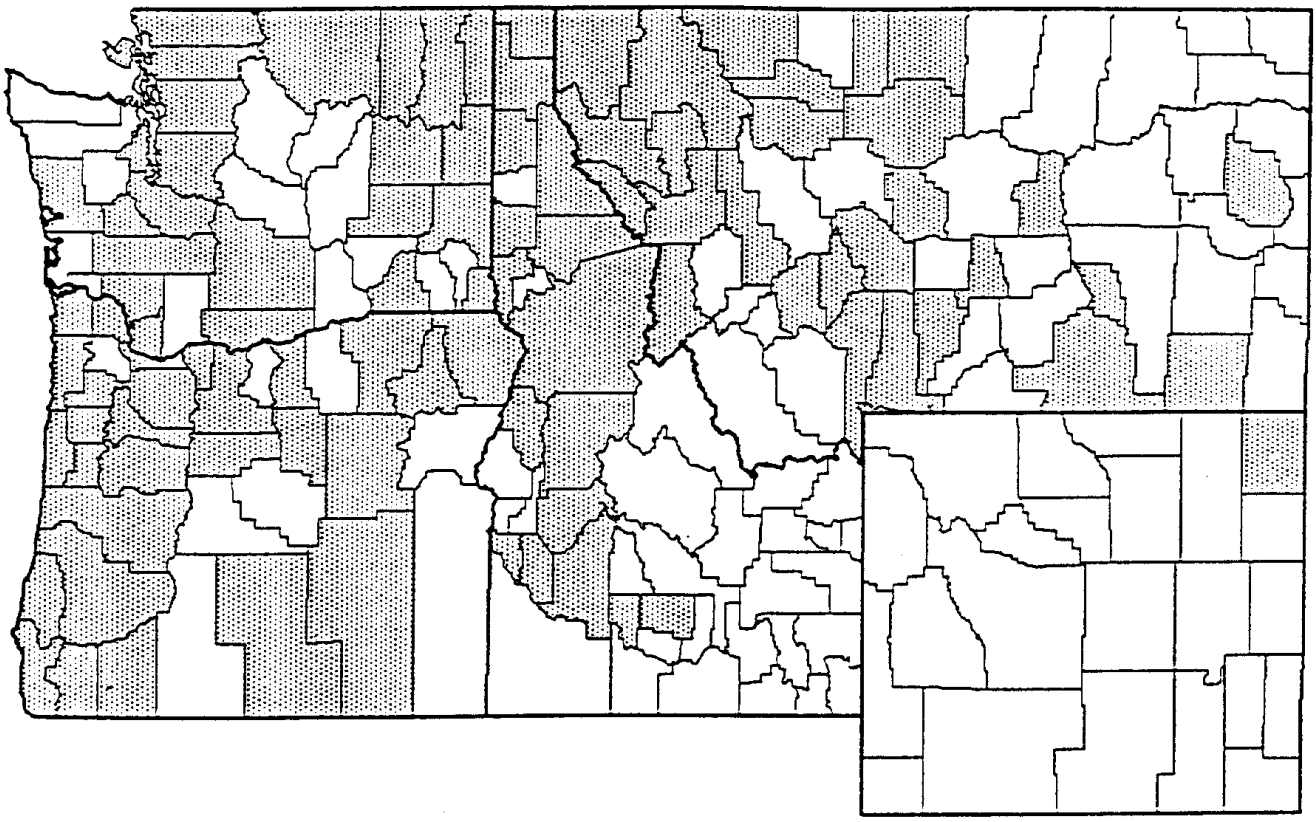
(REL 6.2) COUNTIES REPORTING HYOSCYAMUS NIGER (BLACK HENBANE), 1875-1995.



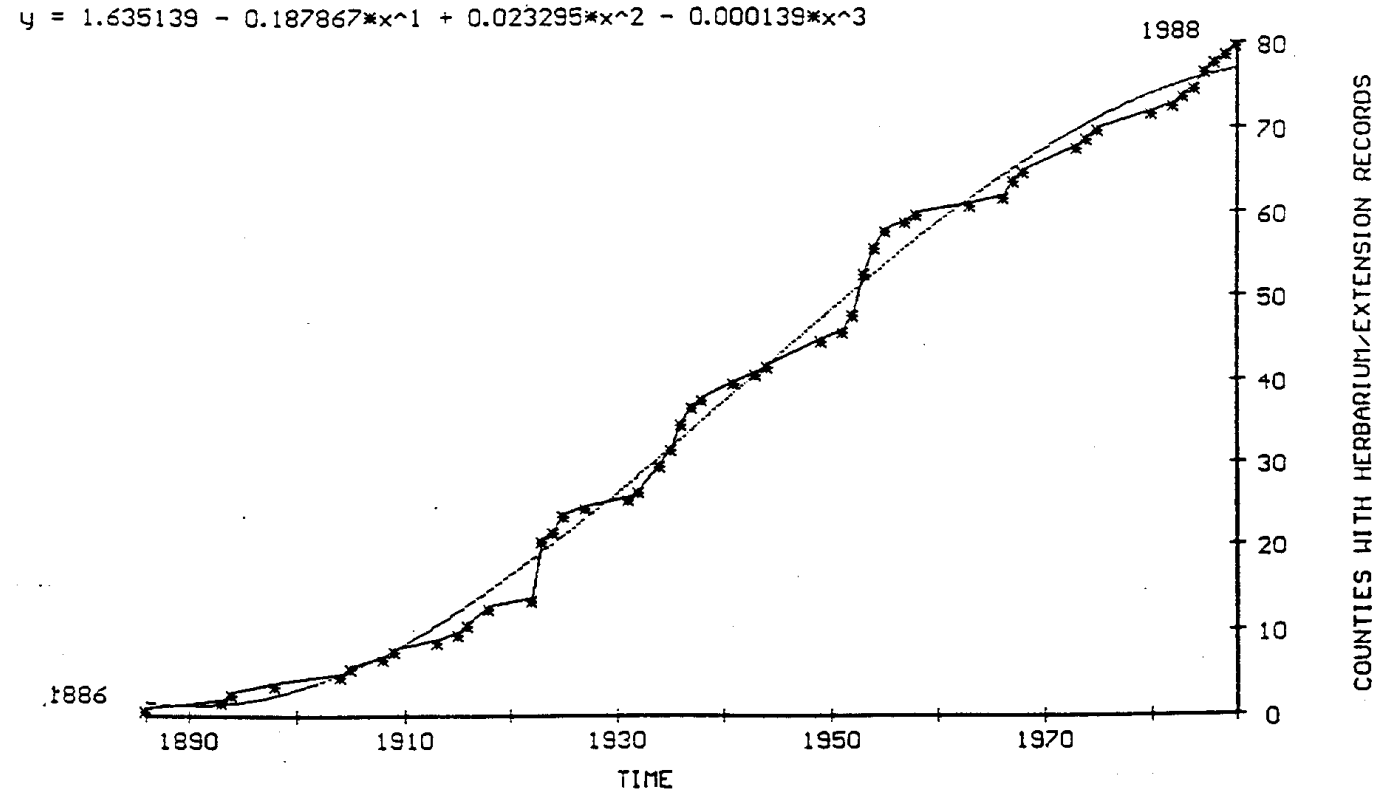
HYOSCYAMUS NIGER INCREASE IN NORTHWEST STATES
y = -0.072178 + 0.169801*x^1 + 0.004630*x^2



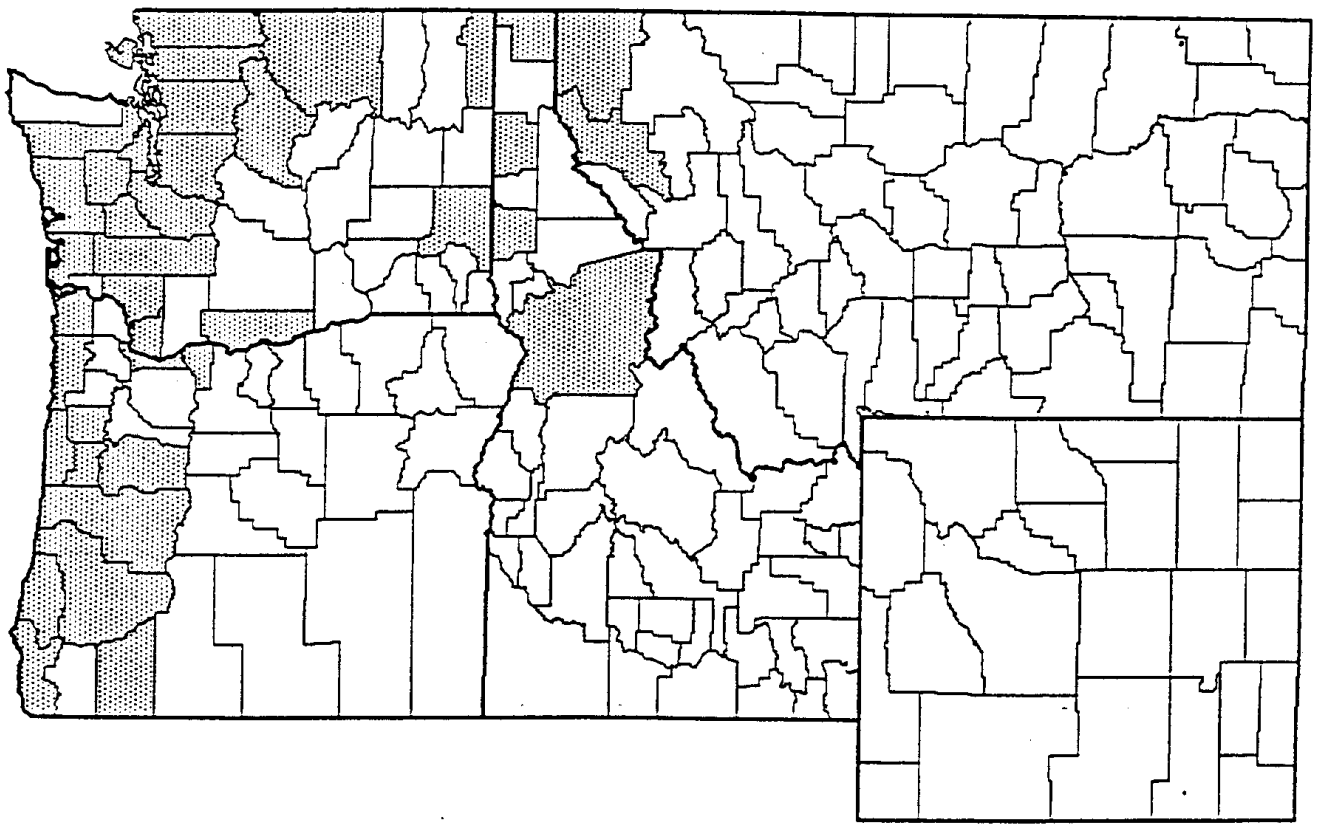
(REL 6.2) COUNTIES REPORTING HYPERICUM PERFORATUM (COMMON ST. JOHNS WORT), 1875-1995.



HYPERICUM PERFORATUM INCREASE IN NORTHWEST STATES
y = 1.635139 - 0.187867*x^1 + 0.023295*x^2 - 0.000139*x^3

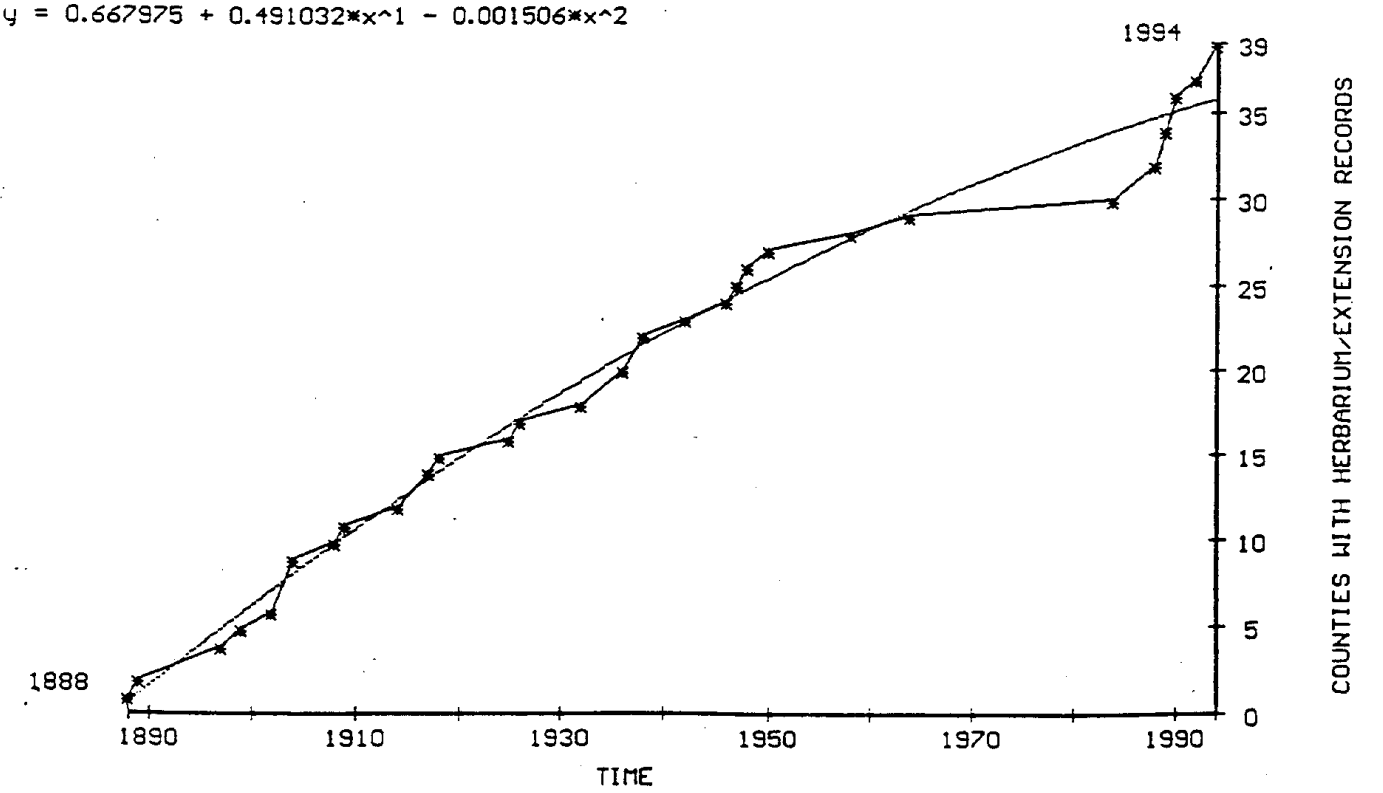


(REL 6.2) COUNTIES REPORTING HYPOCHAERIS RADICATA (SPOTTED CATS EAR), 1875-1995.

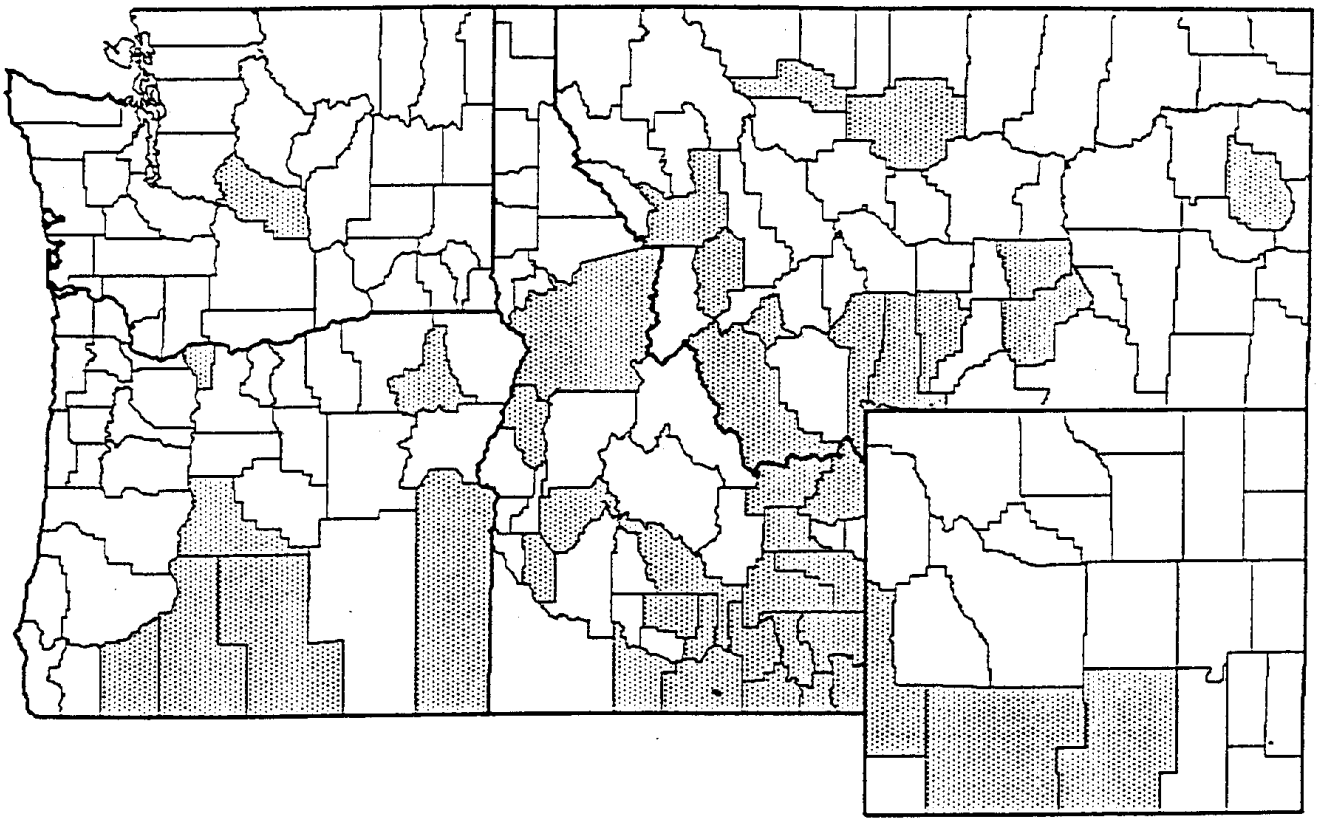


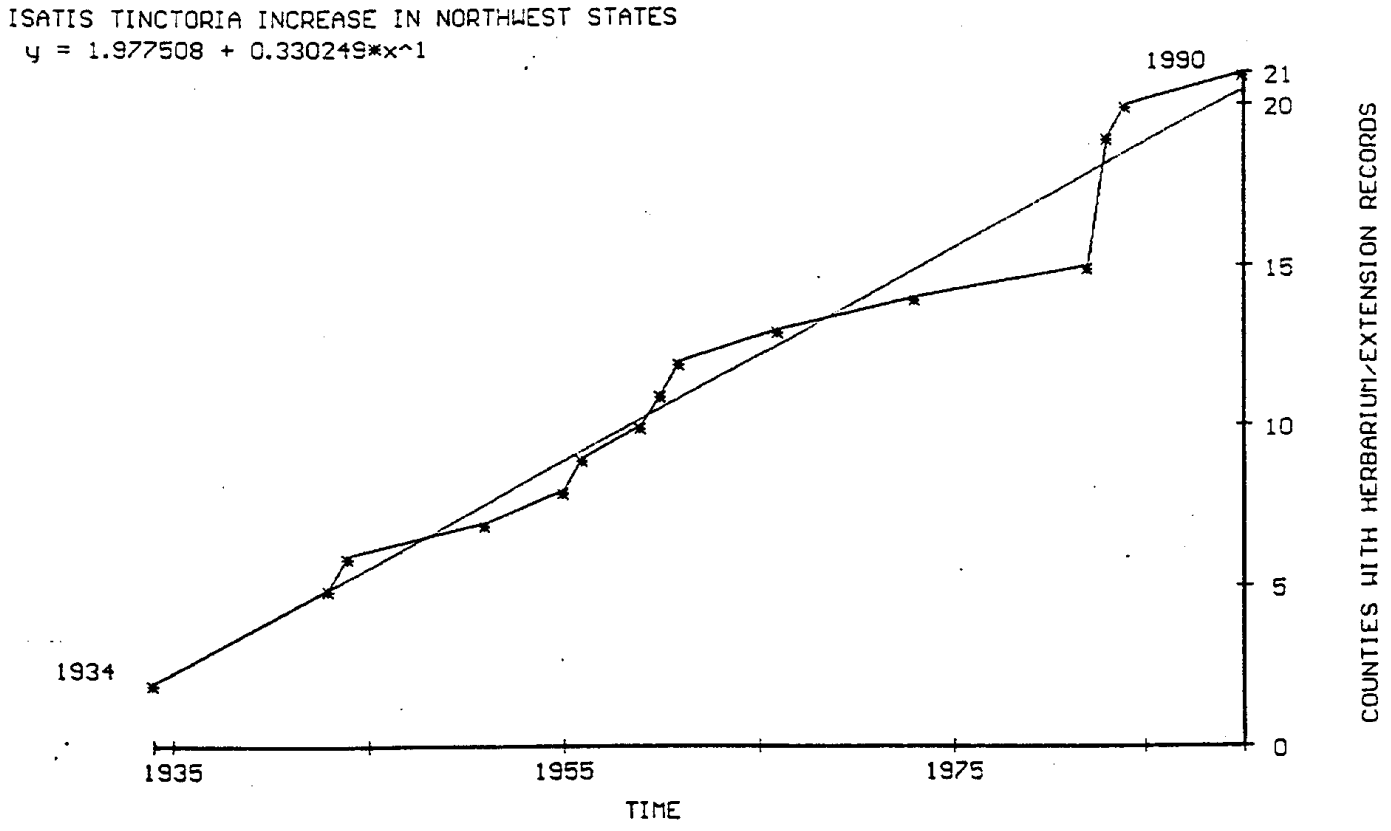
HYPOCHAERIS RADICATA INCREASE IN NORTHWEST STATES

y = 0.667975 + 0.491032*x^1 - 0.001506*x^2

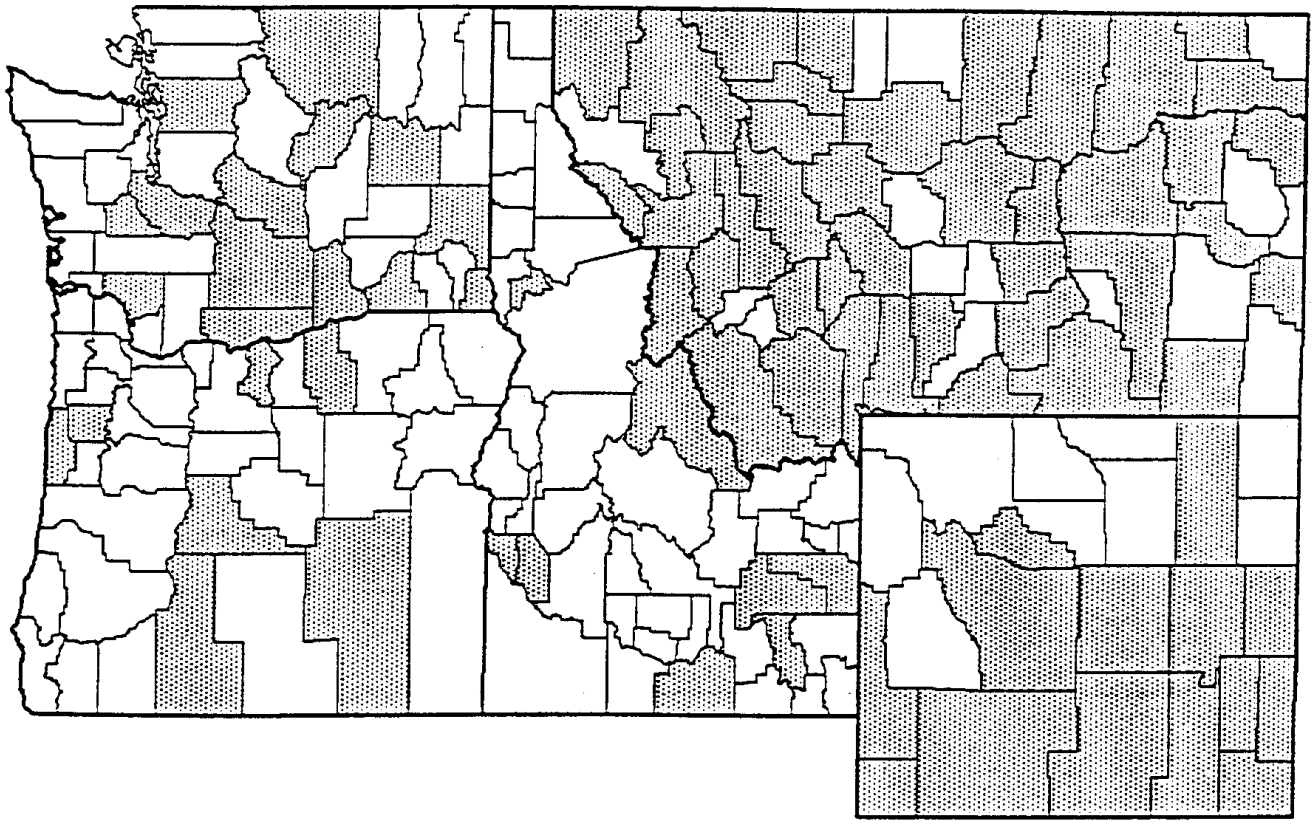


(REL 6.2) COUNTIES REPORTING ISATIS TINCTORIA (DYER'S WOAD), 1875-1995.

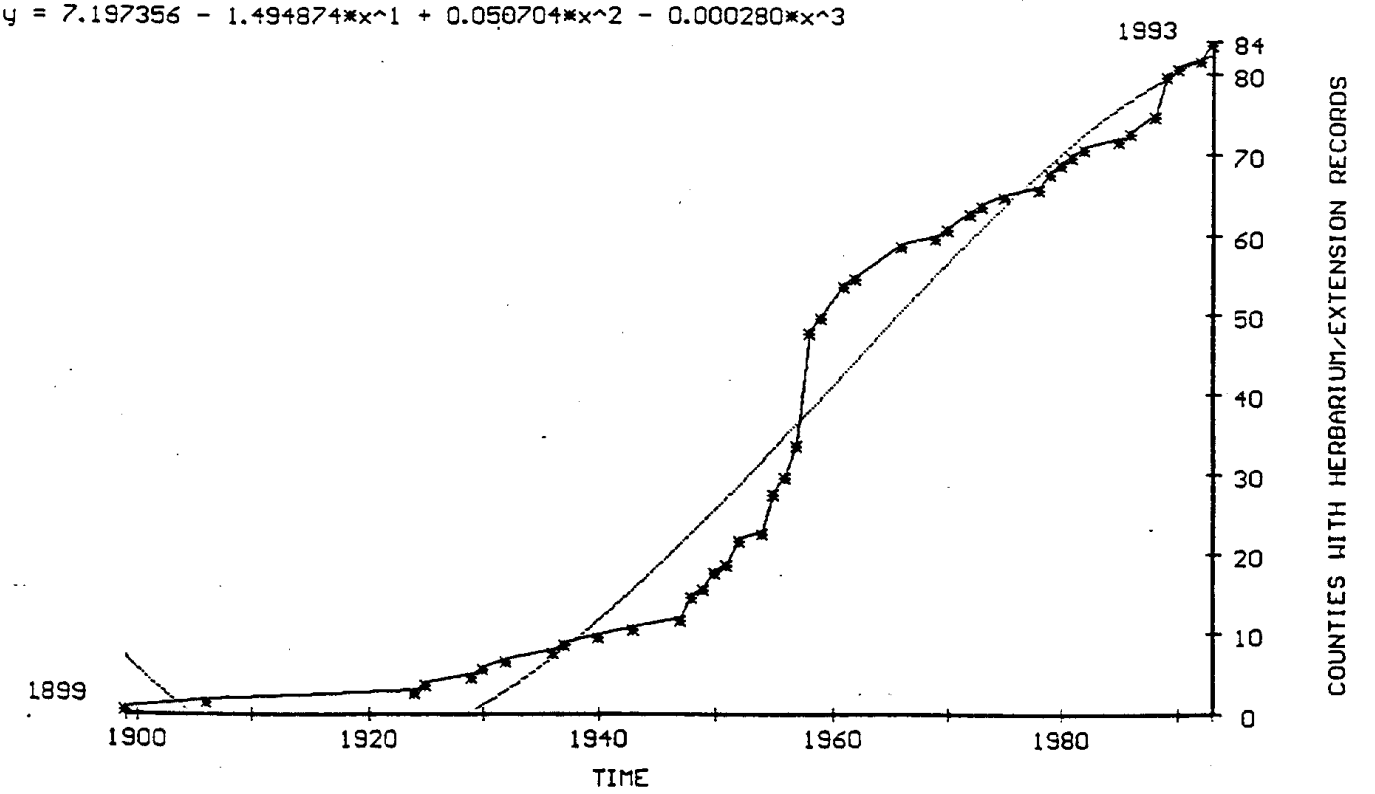




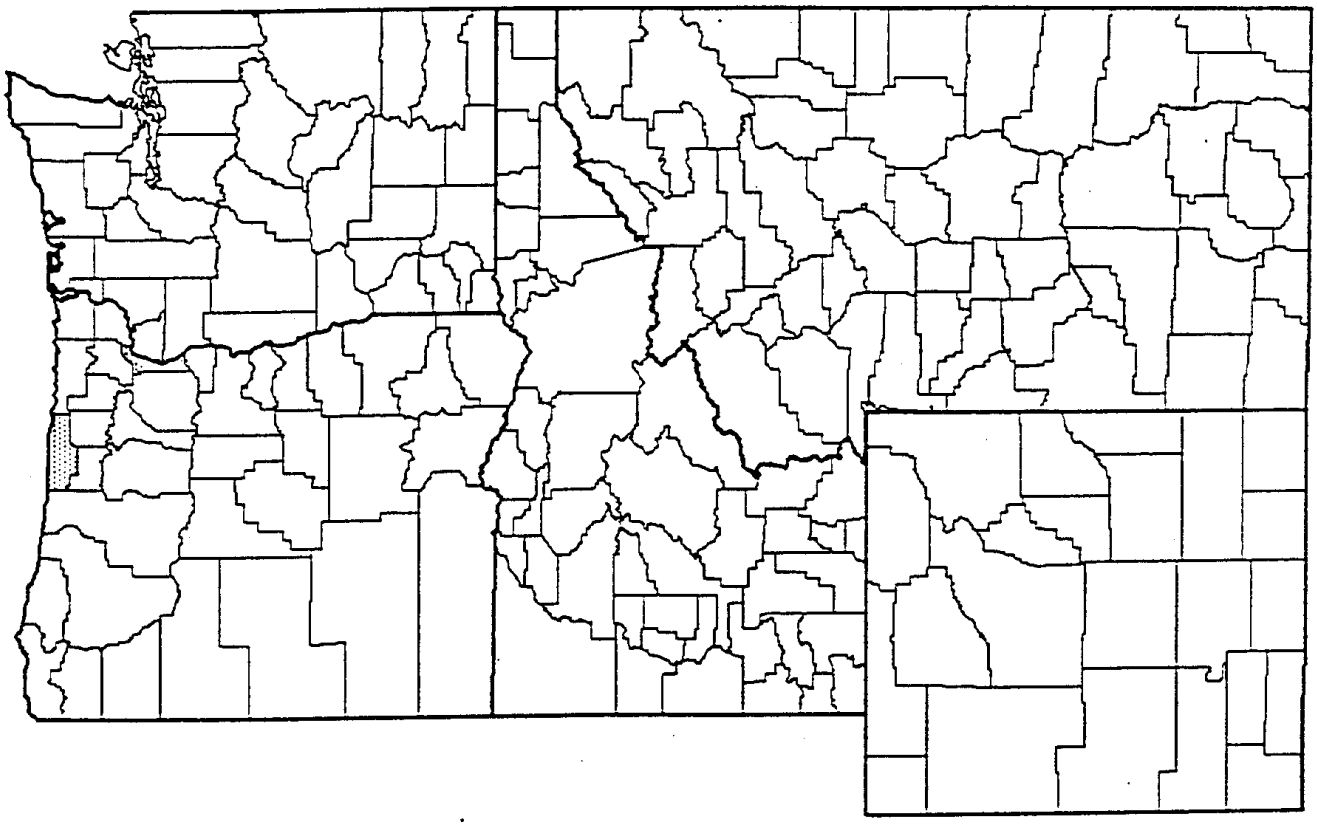
(REL 6.2) COUNTIES REPORTING KOCHIA SCOPARIA (KOCHIA), 1875-1995.



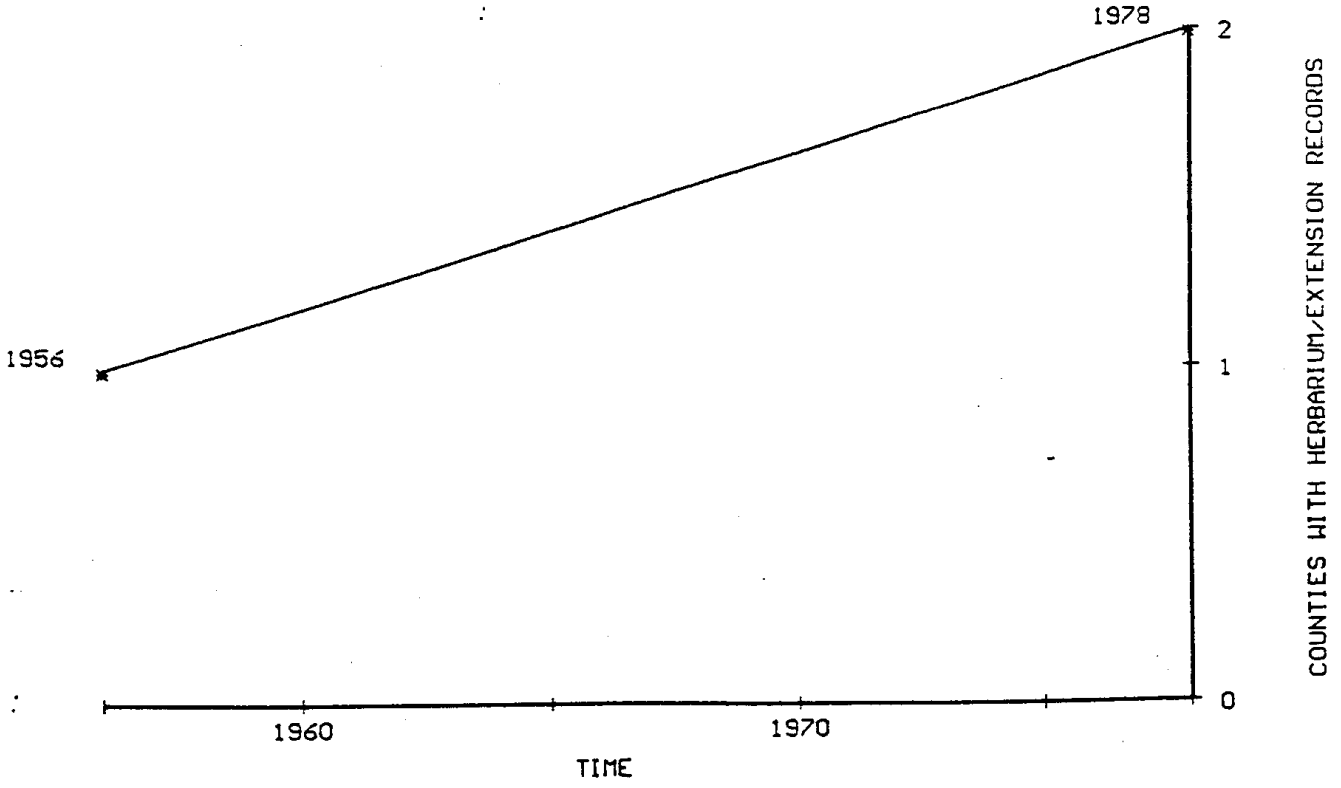
KOCHIA SCOPARIA INCREASE IN NORTHWEST STATES
y = 7.197356 - 1.494874*x^1 + 0.050704*x^2 - 0.000280*x^3



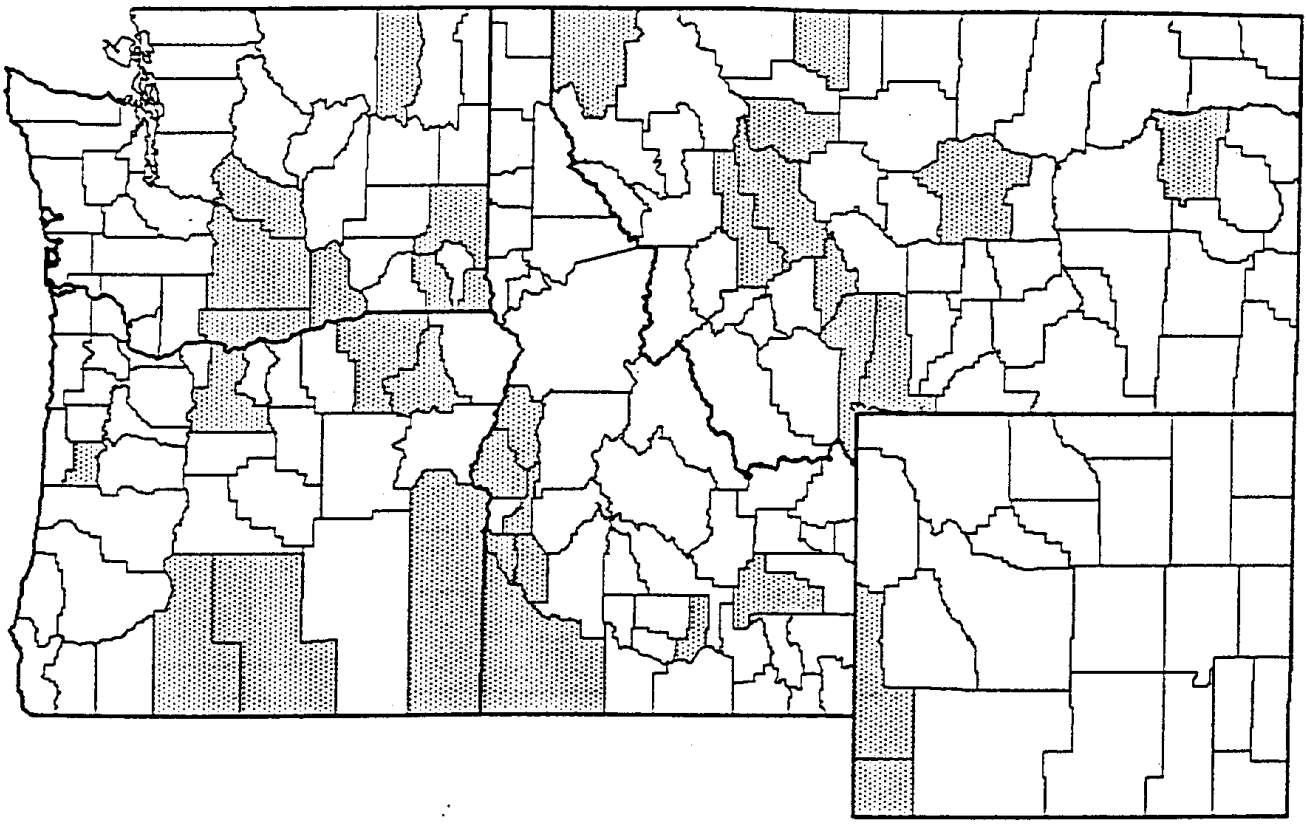
(REL 6.2) COUNTIES REPORTING LAMIUM HYBRIDUM (DEAD-NETTLE), 1875-1995.



LAMIUM HYBRIDUM INCREASE IN NORTHWEST STATES

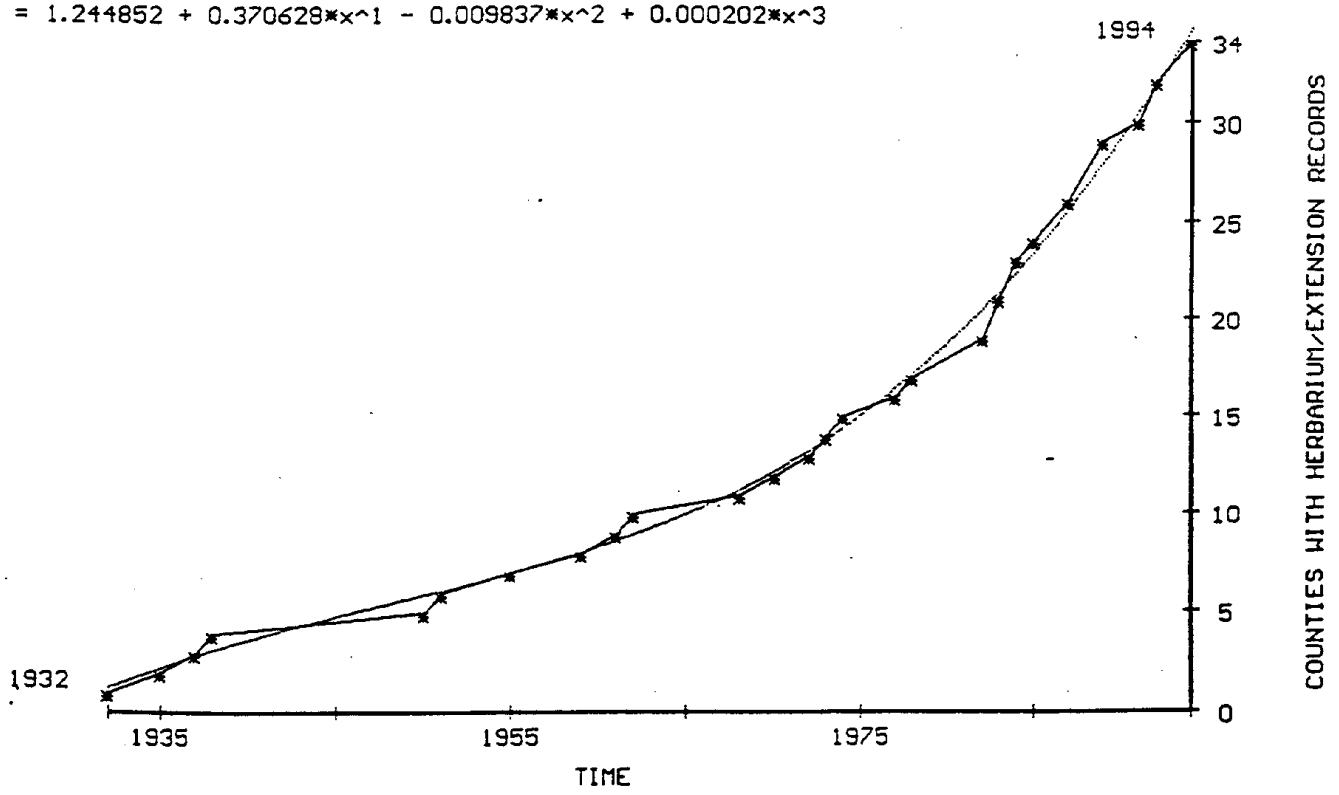


(REL 6.2) COUNTIES REPORTING LEPIDIUM LATIFOLIUM (PERENNIAL PEPPERWEED), 1875-1995.

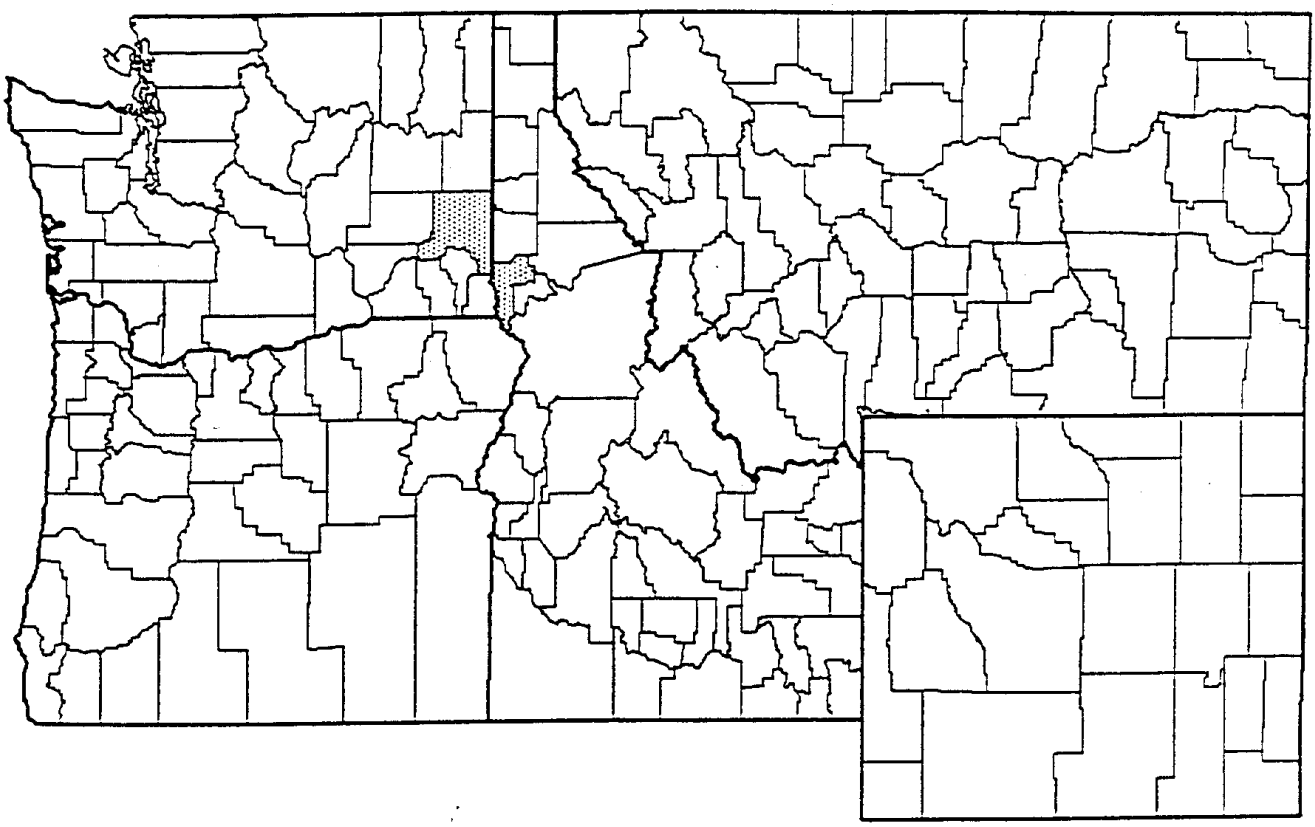


LEPIDIUM LATIFOLIUM INCREASE IN NORTHWEST STATES

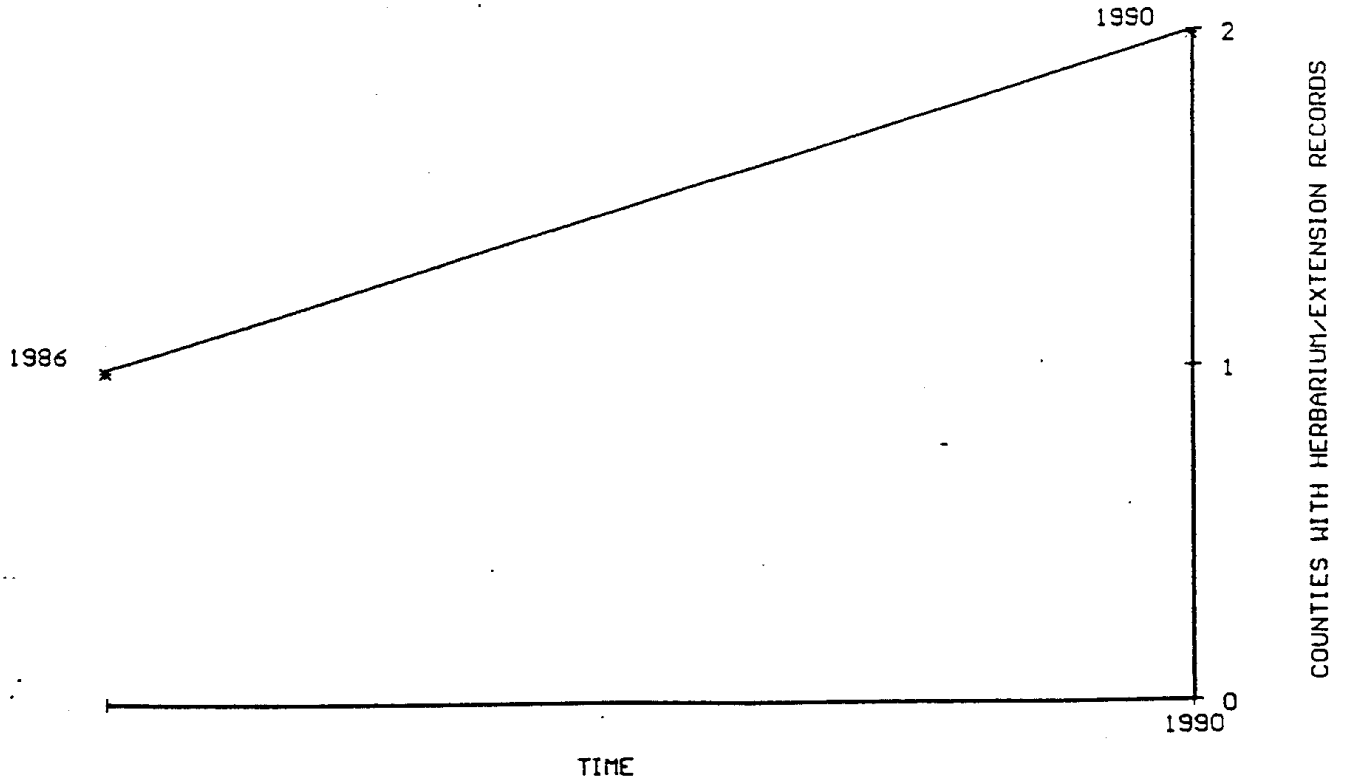
y = 1.244852 + 0.370628*x^1 - 0.009837*x^2 + 0.000202*x^3



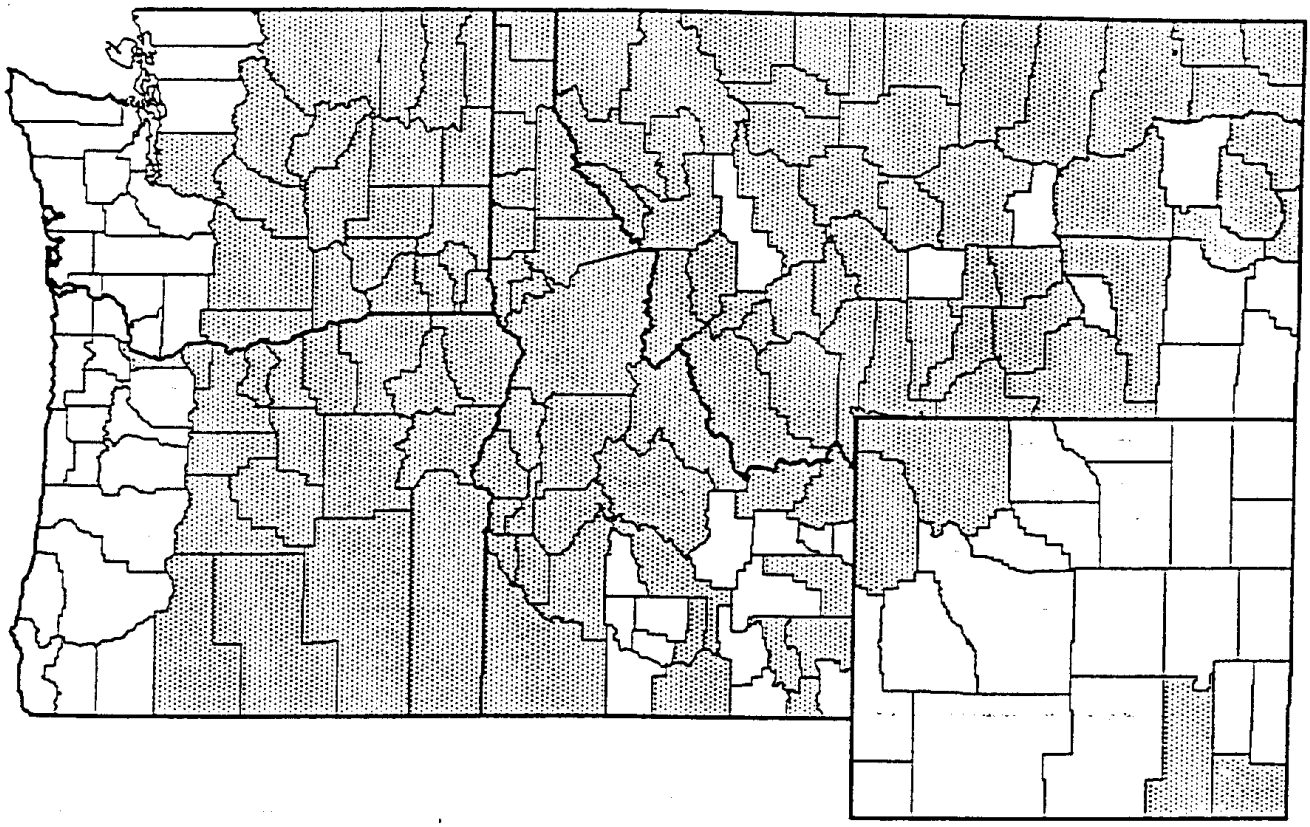
(REL 6.2) COUNTIES REPORTING LEPYRODICLIS HOLOSTEOIDES (), 1875-1995.



LEPYRODICLIS HOLOSTEOIDES INCREASE IN NORTHWEST STATES

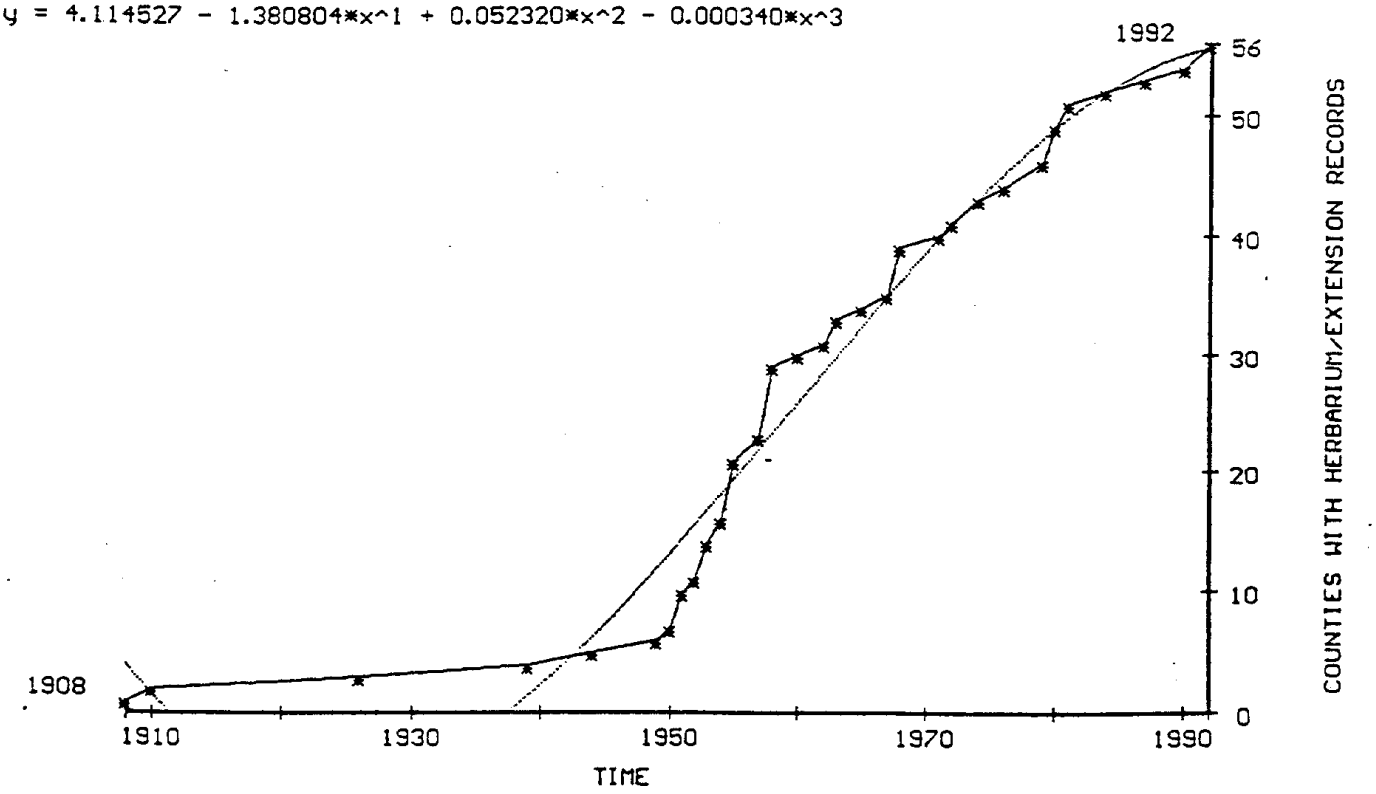


(REL 6.2) COUNTIES REPORTING LINARIA DALMATICA (DALMATIAN TOADFLAX), 1875-1995.

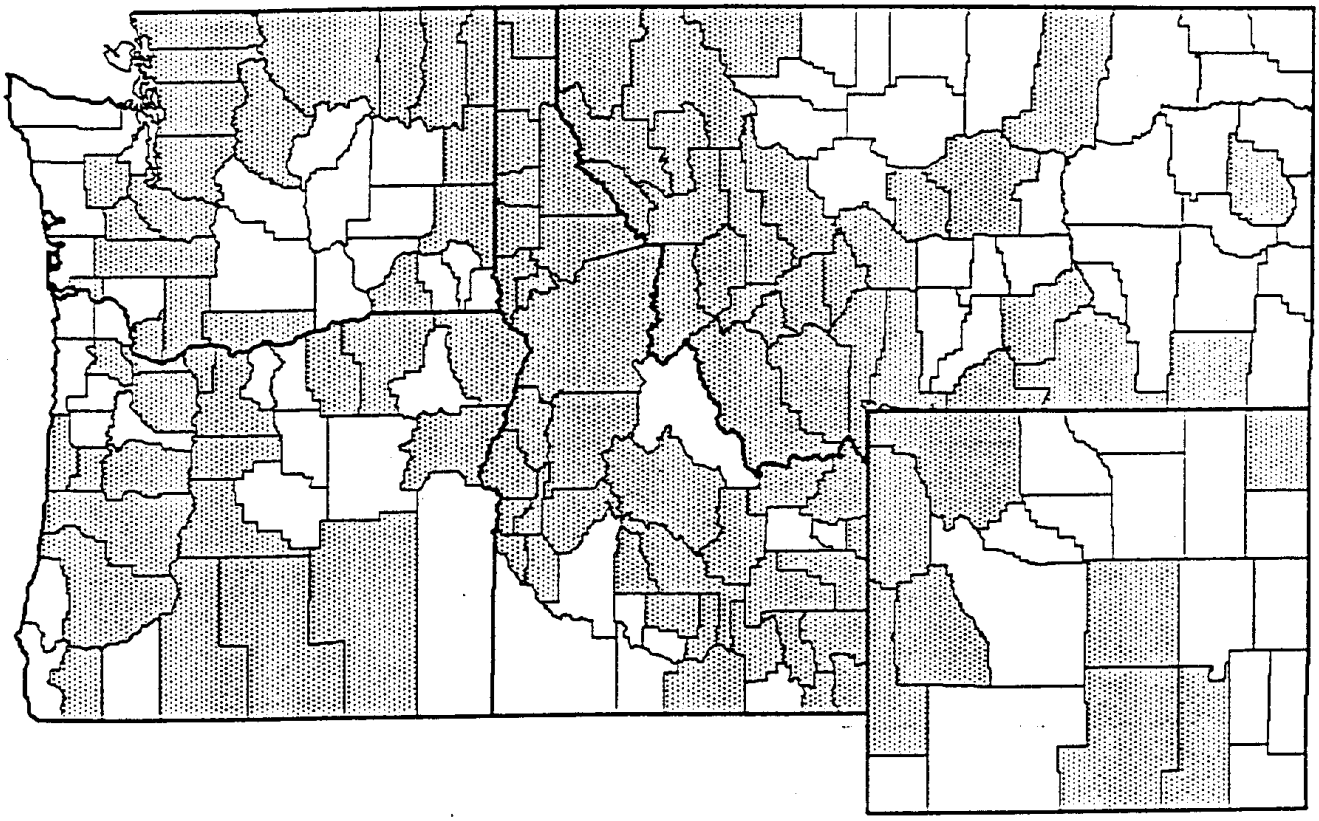


LINARIA DALMATICA INCREASE IN NORTHWEST STATES

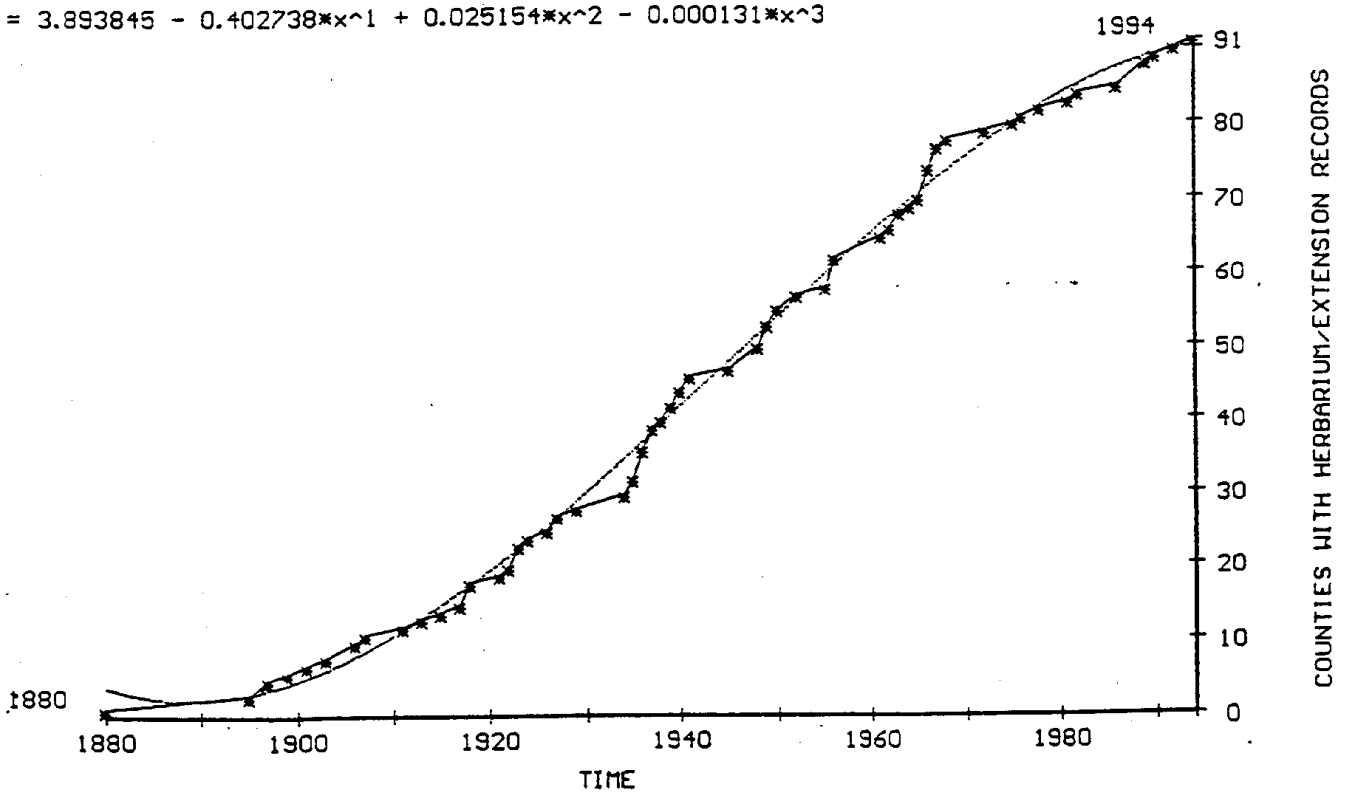
y = 4.114527 - 1.380804*x^1 + 0.052320*x^2 - 0.000340*x^3



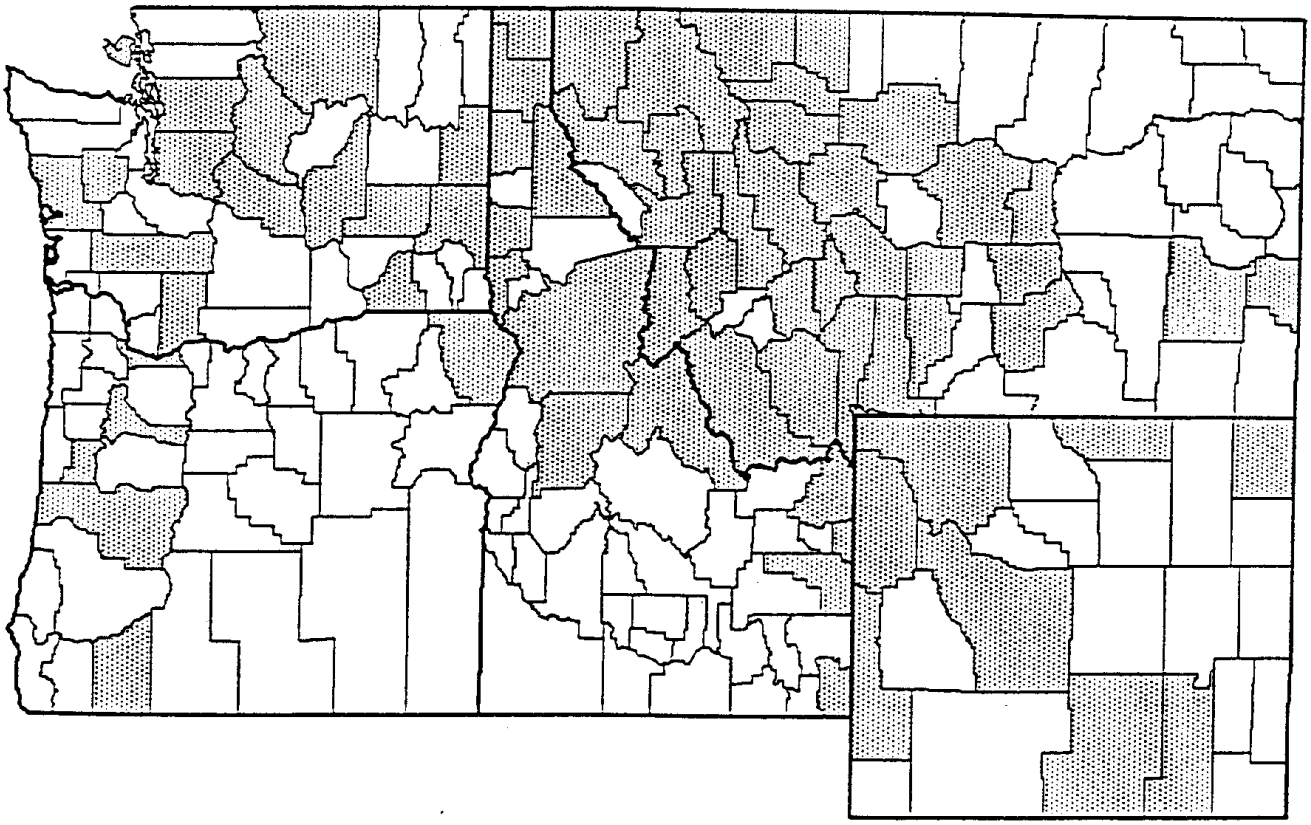
(REL 6.2) COUNTIES REPORTING LINARIA VULGARIS (YELLOW TOADFLAX), 1875-1995.



LINARIA VULGARIS INCREASE IN NORTHWEST STATES
y = 3.893845 - 0.402738*x^1 + 0.025154*x^2 - 0.000131*x^3

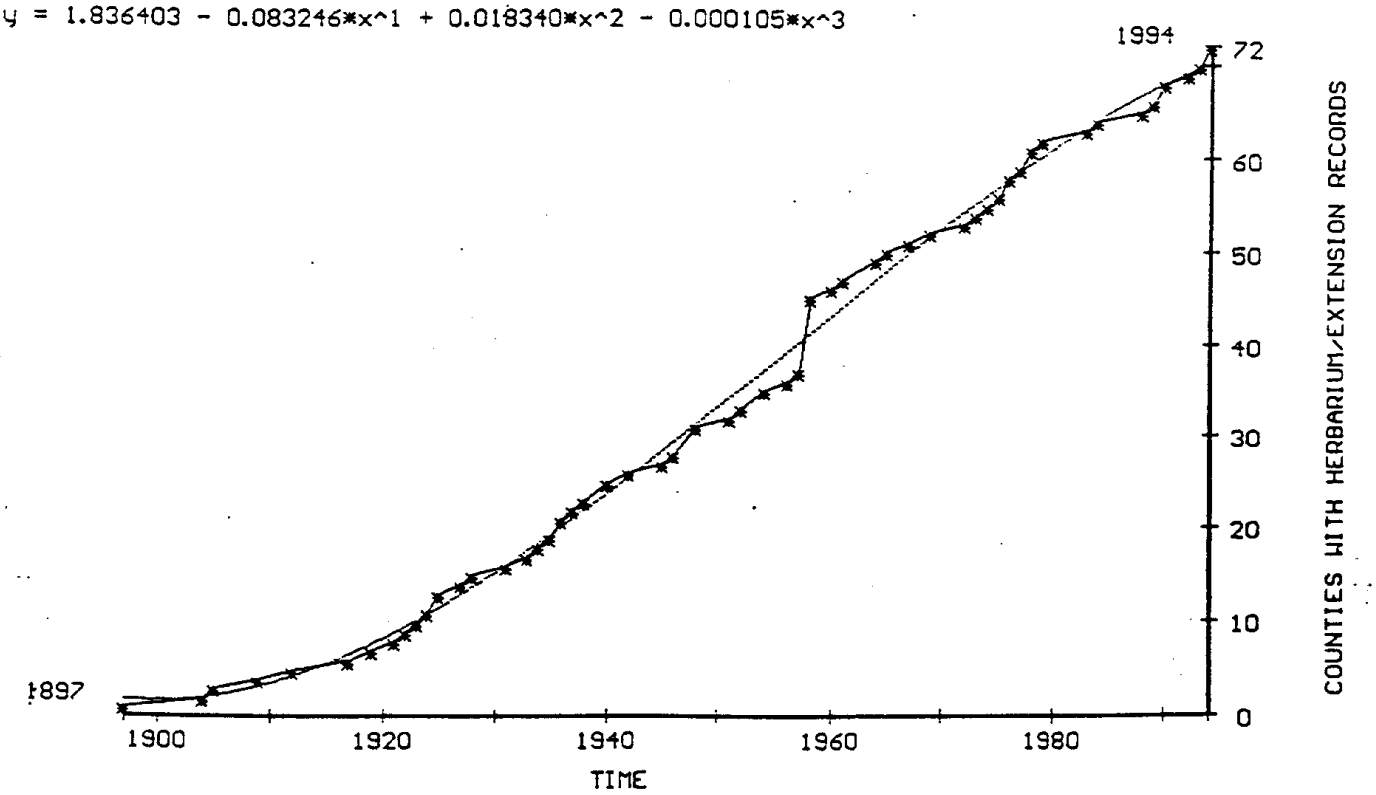


(REL 6.2) COUNTIES REPORTING LYCHNIS ALBA (WHITE CAMPION), 1875-1995.

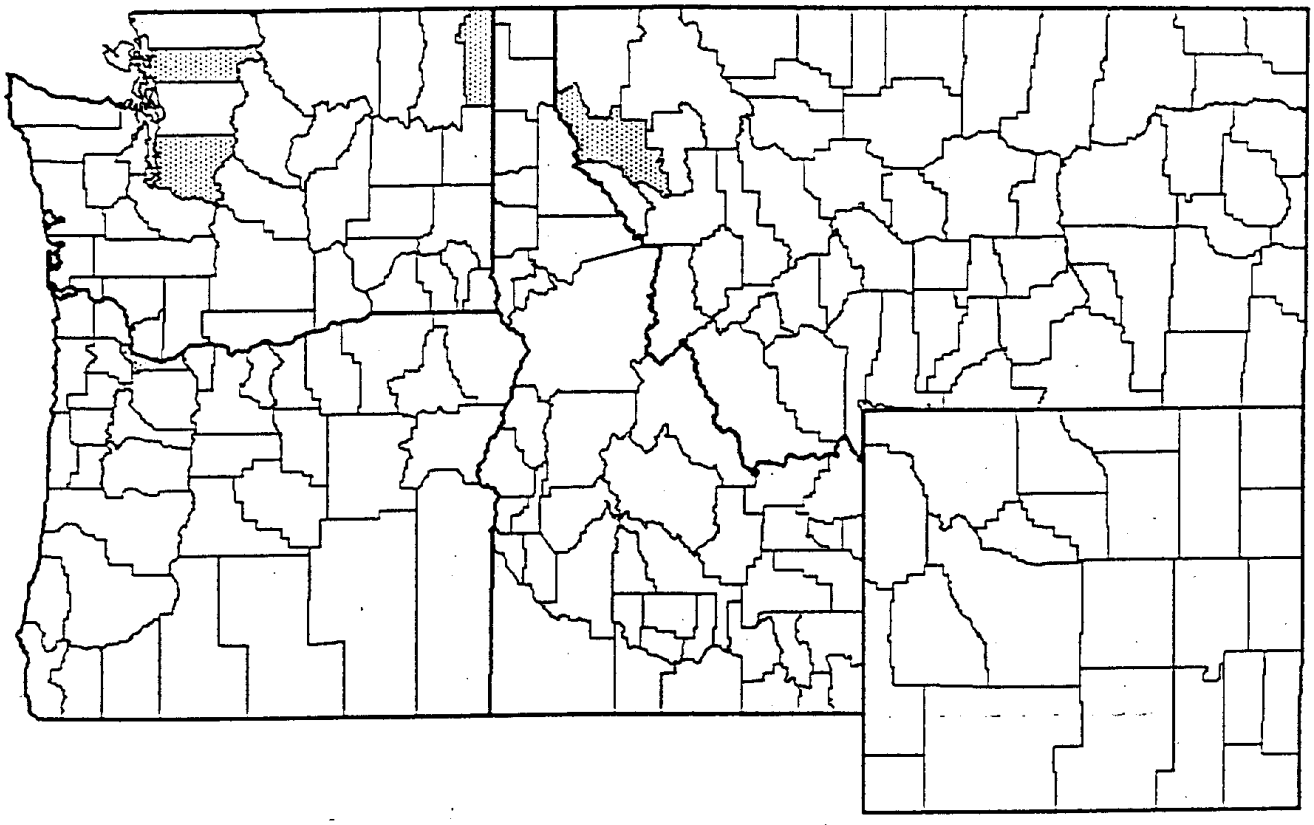


LYCHNIS ALBA INCREASE IN NORTHWEST STATES

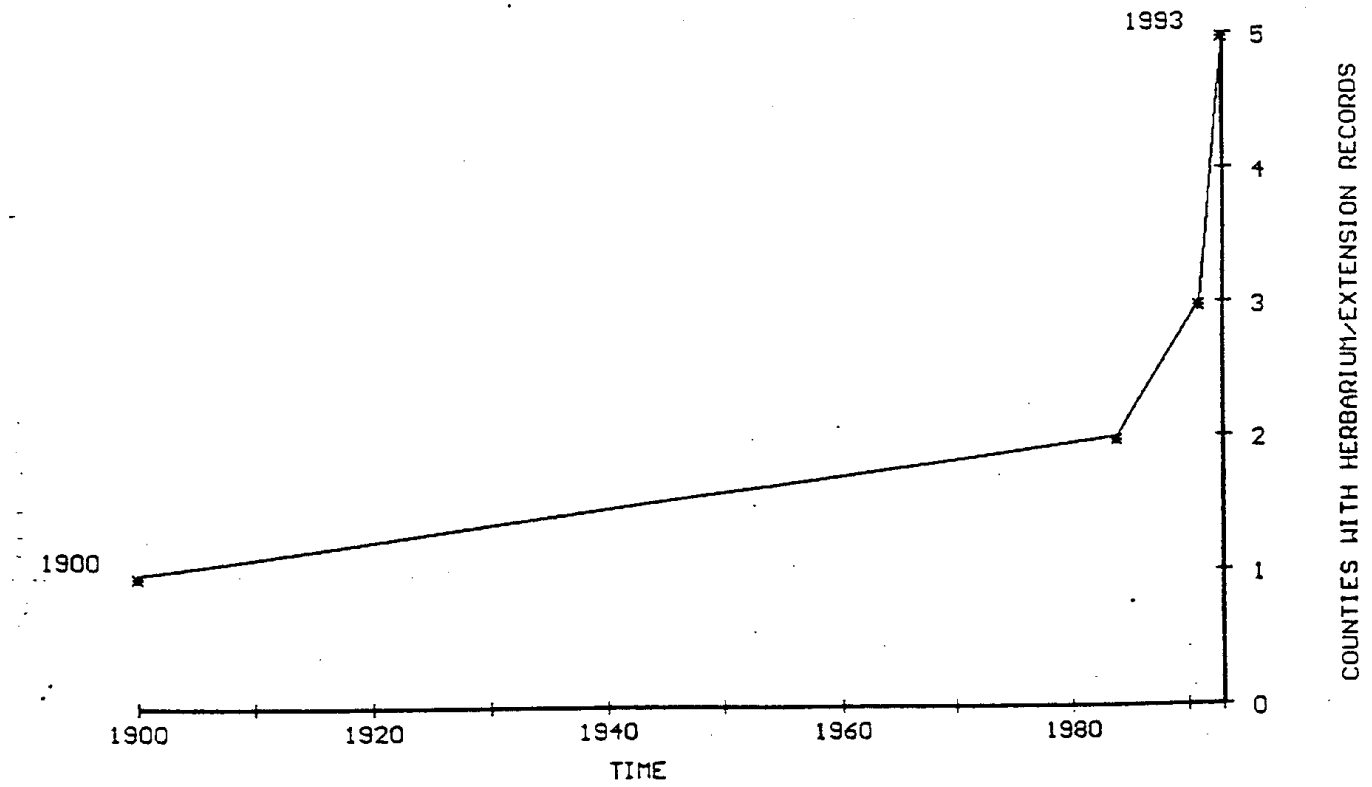
y = 1.836403 - 0.083246*x^1 + 0.018340*x^2 - 0.000105*x^3



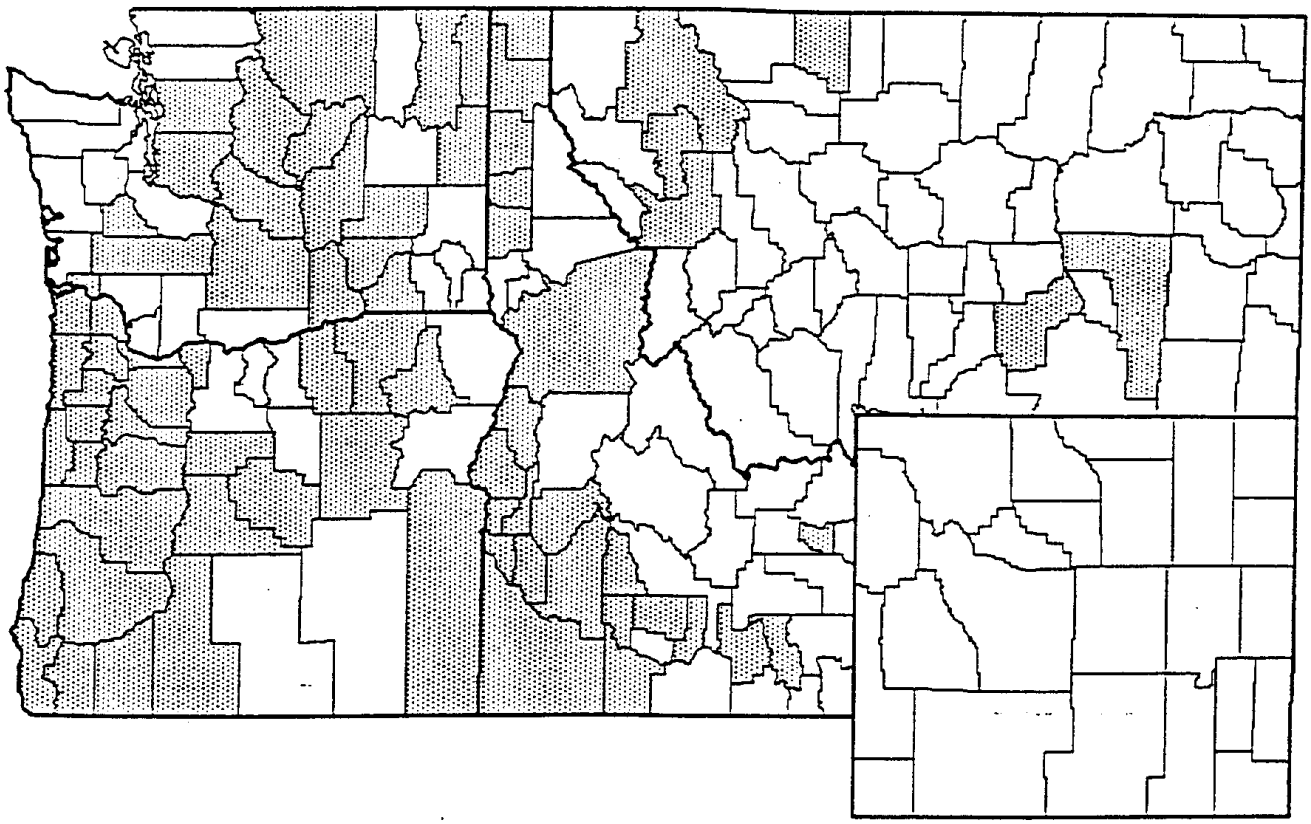
(REL 6.2) COUNTIES REPORTING LYSIMACHIA VULGARIS (GARDEN LOOSESTRIFE), 1875-1995.



LYSIMACHIA VULGARIS INCREASE IN NORTHWEST STATES

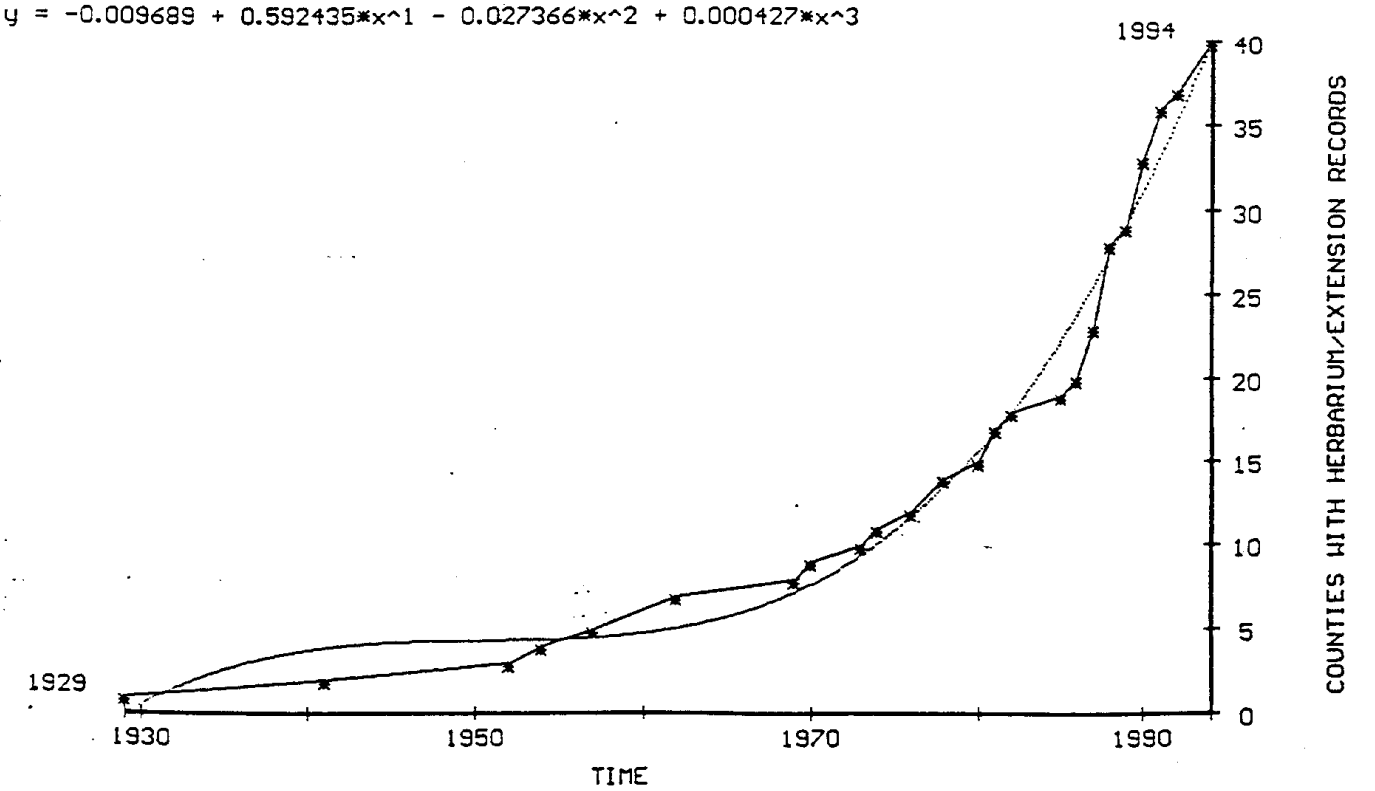


(REL 6.2) COUNTIES REPORTING LYTHRUM SALICARIA (PURPLE LOOSESTRIFE), 1875-1995.

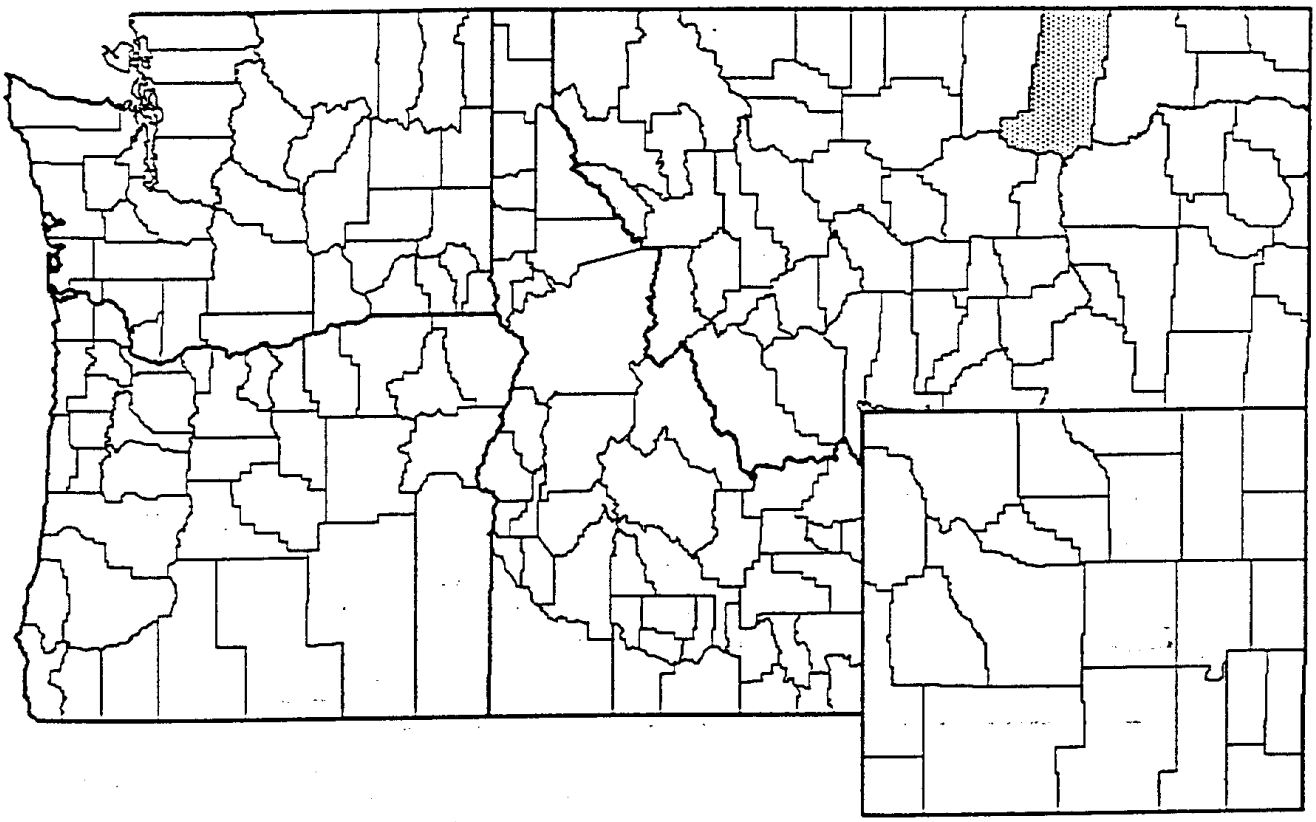


LYTHRUM SALICARIA INCREASE IN NORTHWEST STATES

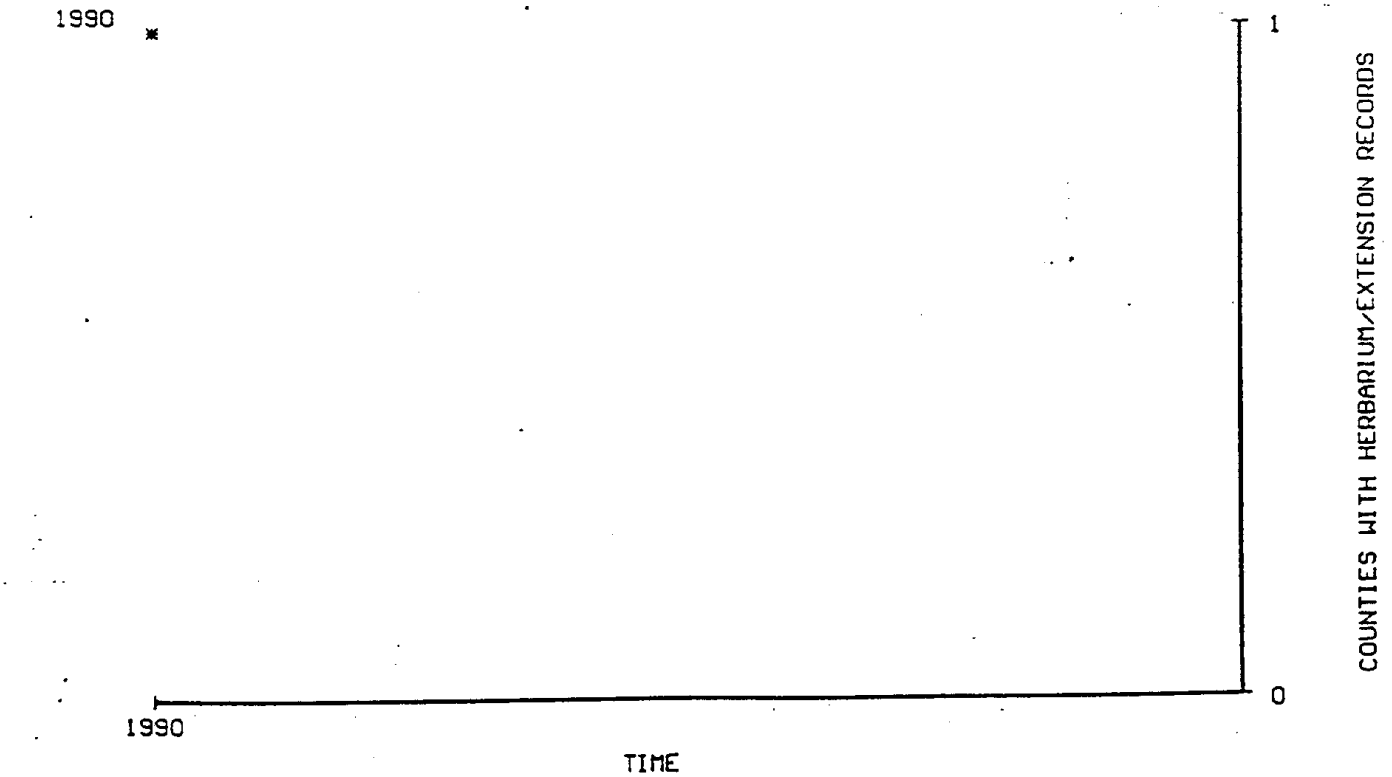
y = -0.009689 + 0.592435*x^1 - 0.027366*x^2 + 0.000427*x^3



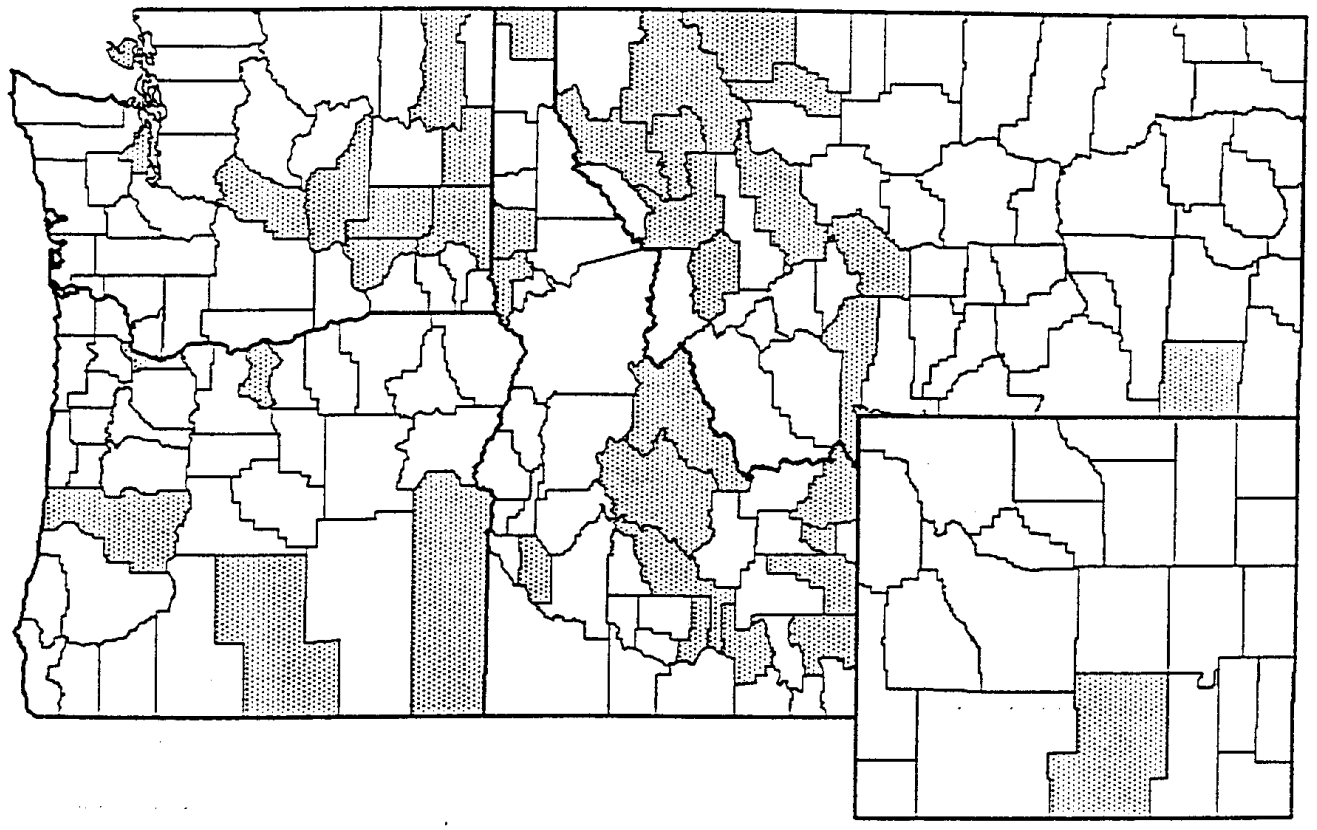
(REL 6.2) COUNTIES REPORTING LYTHRUM VIRGATUM (WANDLIKE LOOSESTRIFE), 1875-1995.



LYTHRUM VIRGATUM INCREASE IN NORTHWEST STATES

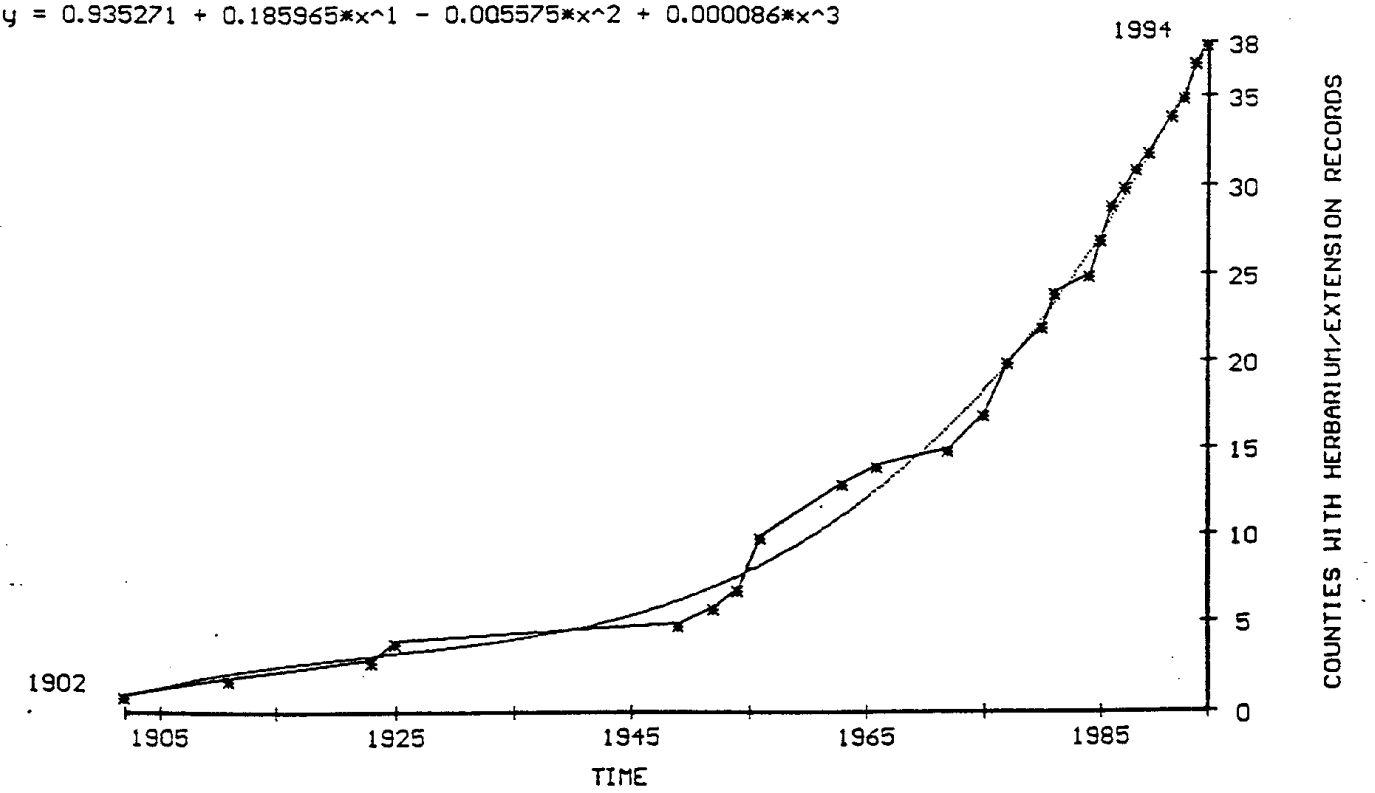


(REL 6.2) COUNTIES REPORTING MATRICARIA MARITIMA (FALSE CHAMOMILE), 1875-1995.

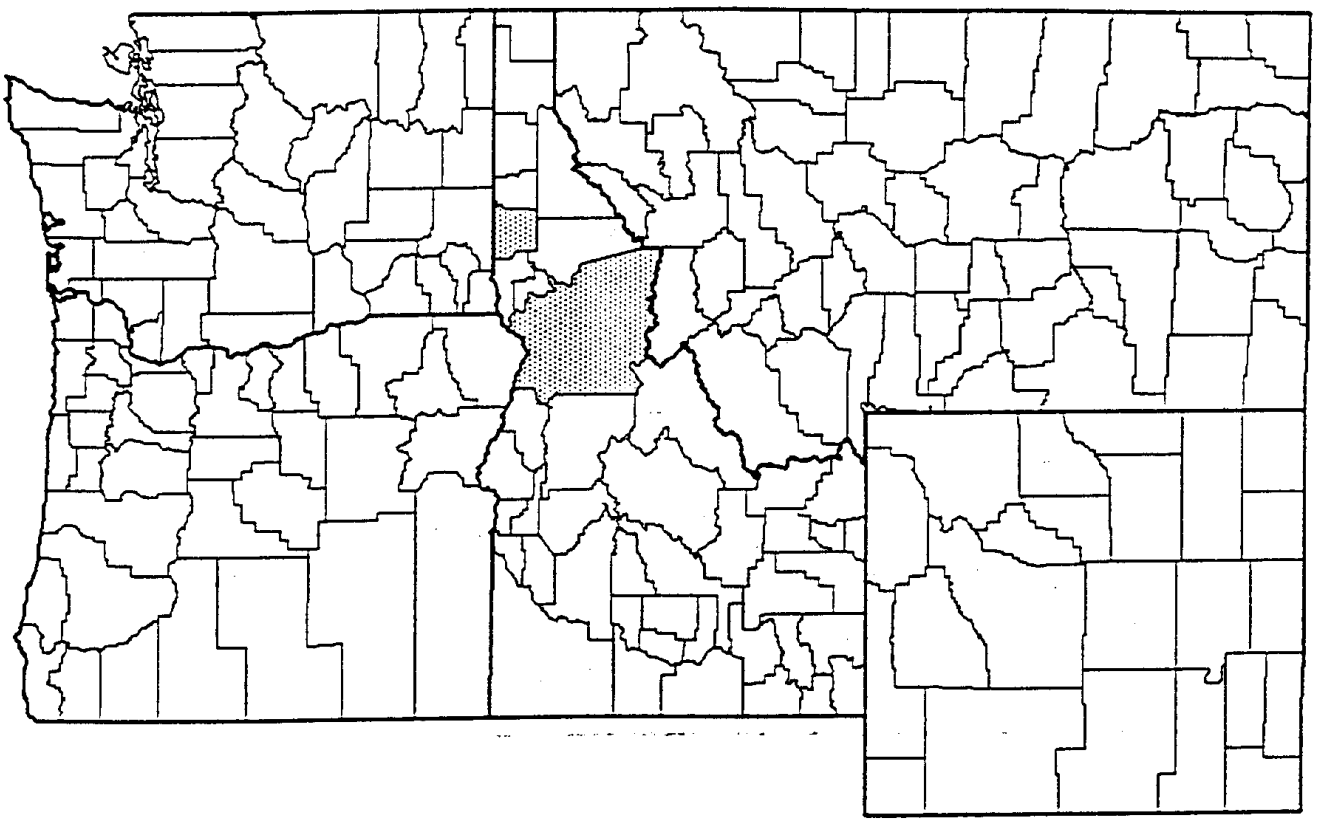


MATRICARIA MARITIMA INCREASE IN NORTHWEST STATES

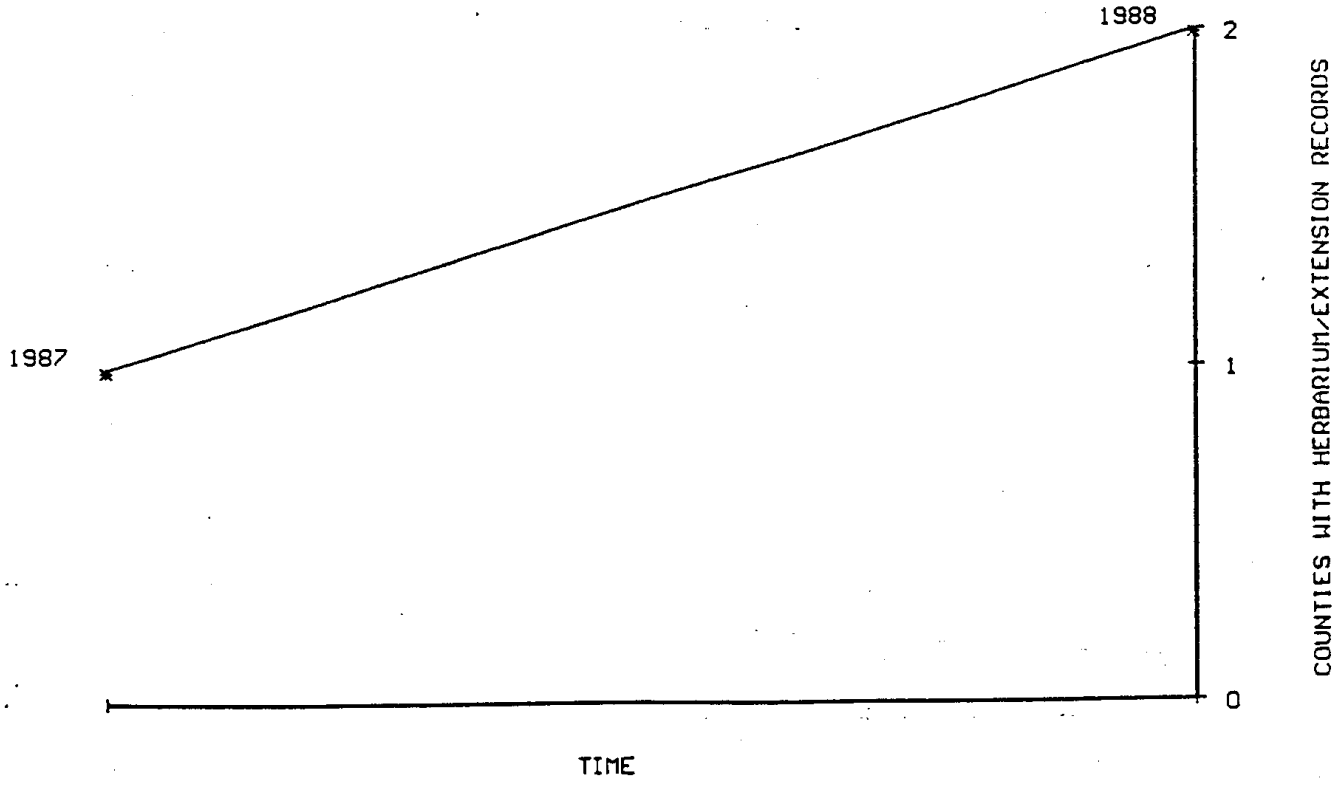
y = 0.935271 + 0.185965*x^1 - 0.005575*x^2 + 0.000086*x^3



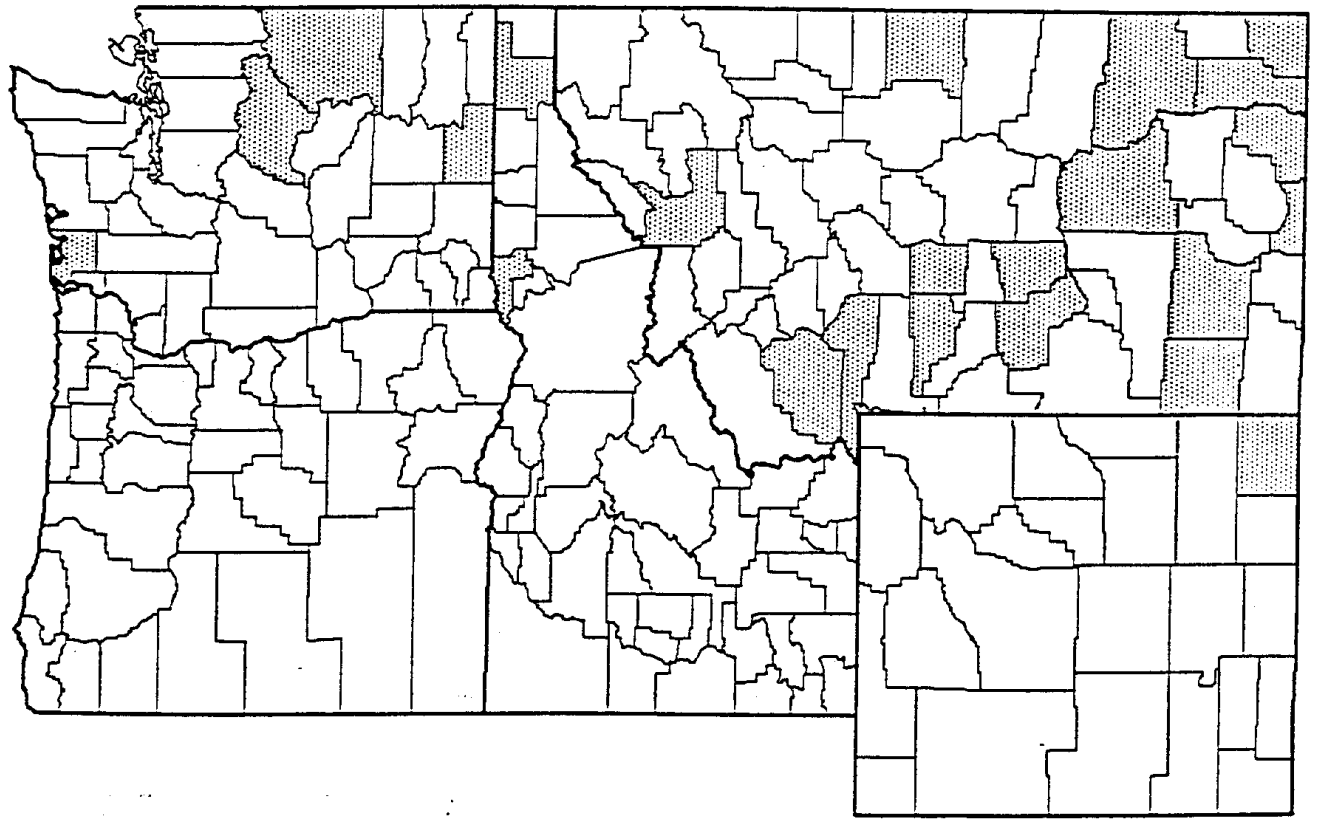
(REL 6.2) COUNTIES REPORTING MILIUM VERNALE (SPRING MILLET GRASS), 1875-1995.



MILIUM VERNALE INCREASE IN NORTHWEST STATES

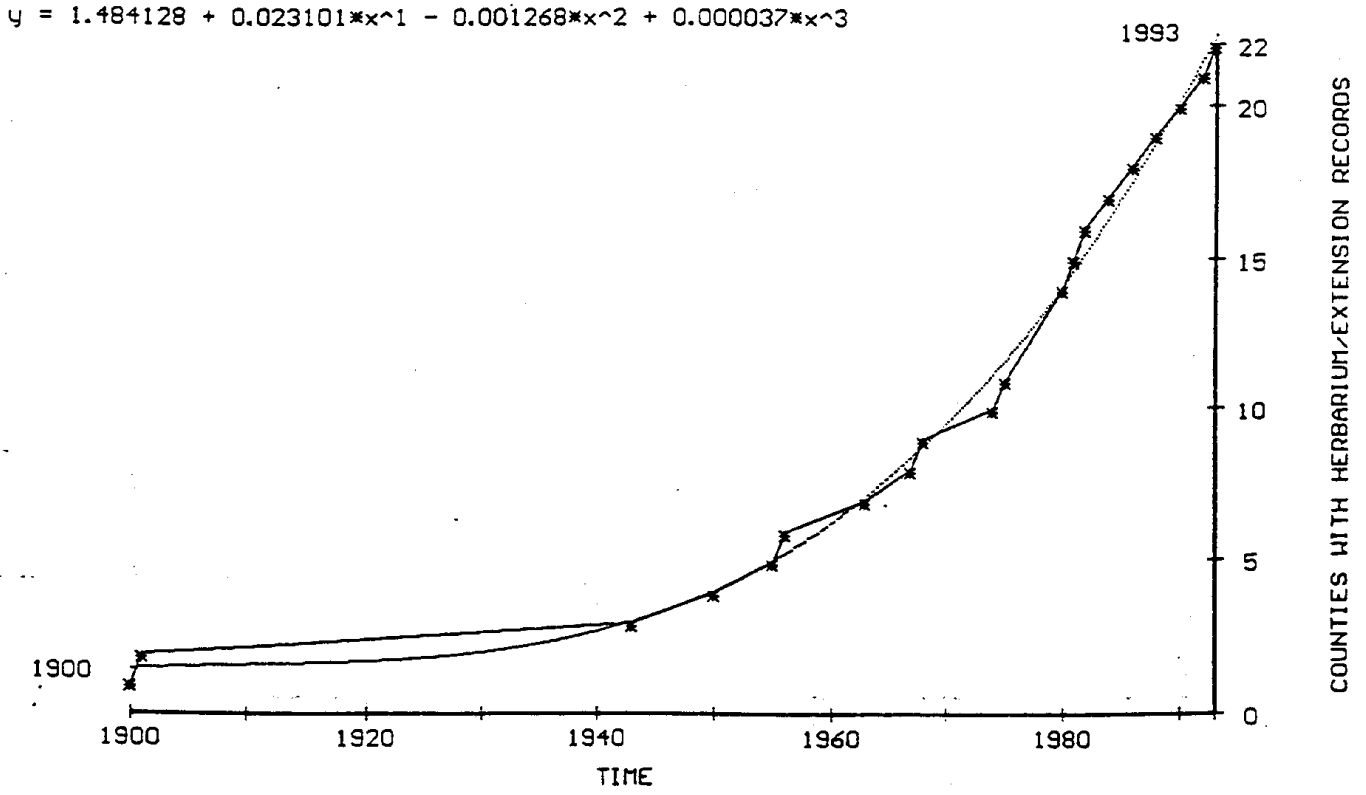


(REL 6.2) COUNTIES REPORTING MIRABILIS NYCTAGINEA (WILD FOUR O'CLOCK), 1875-1995.

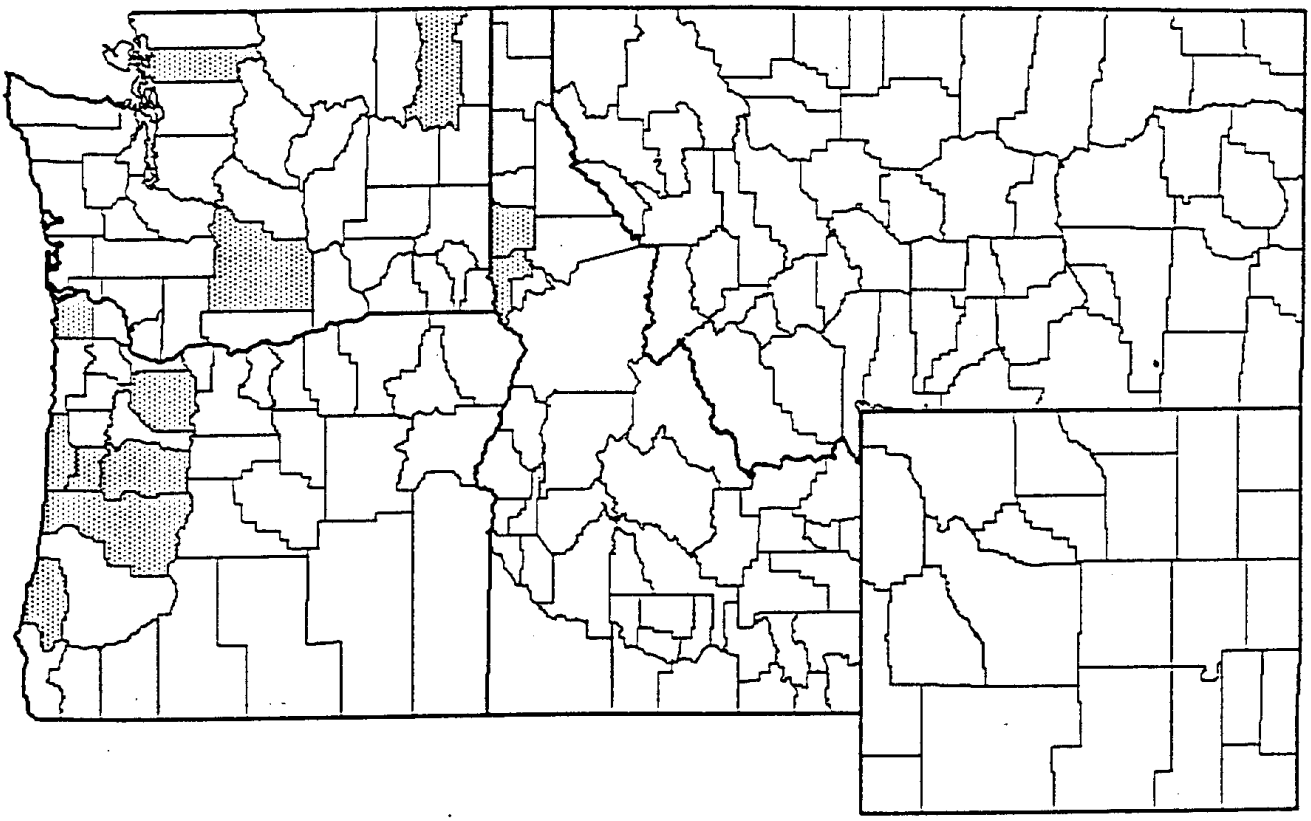


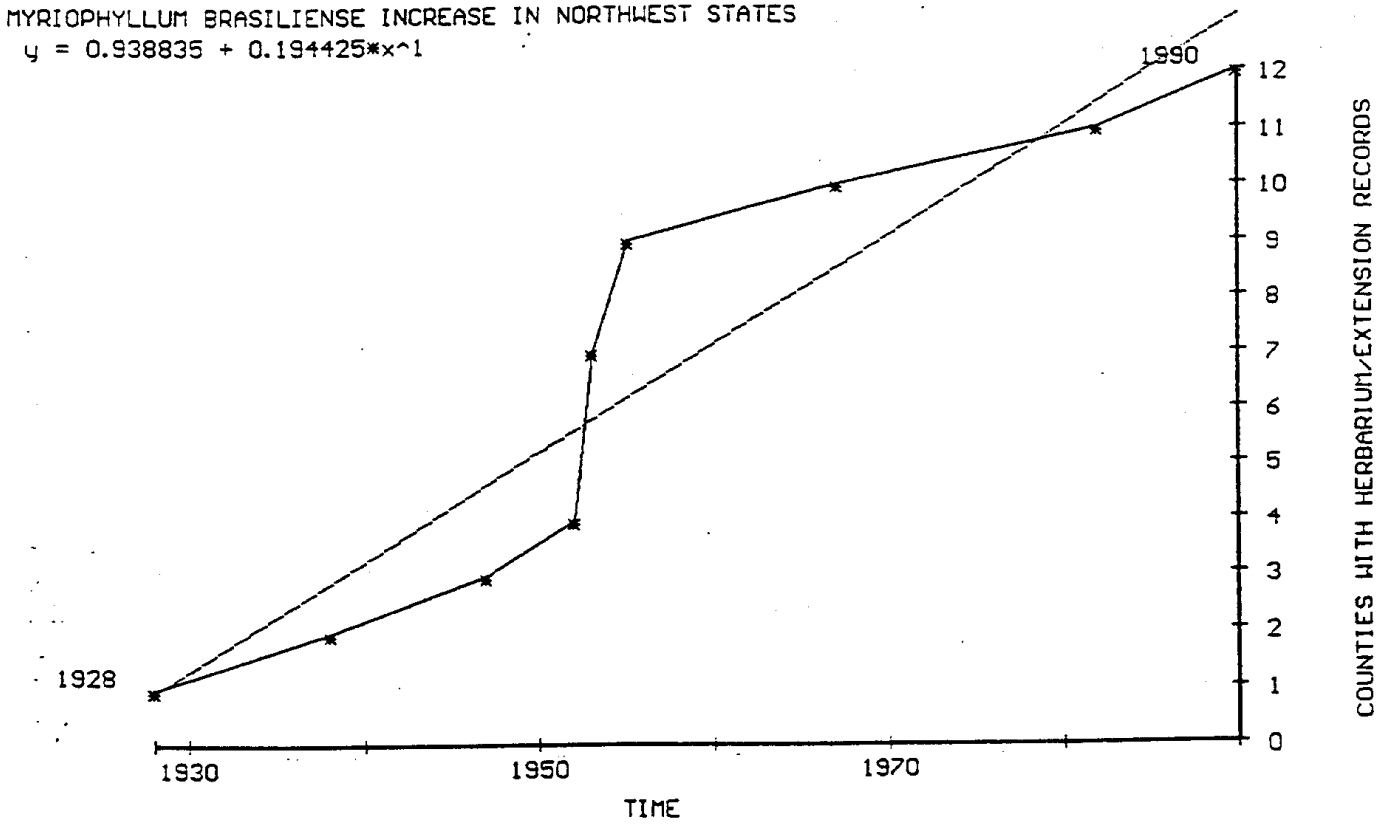
MIRABILIS NYCTAGINEA INCREASE IN NORTHWEST STATES

y = 1.484128 + 0.023101*x^1 - 0.001268*x^2 + 0.000037*x^3

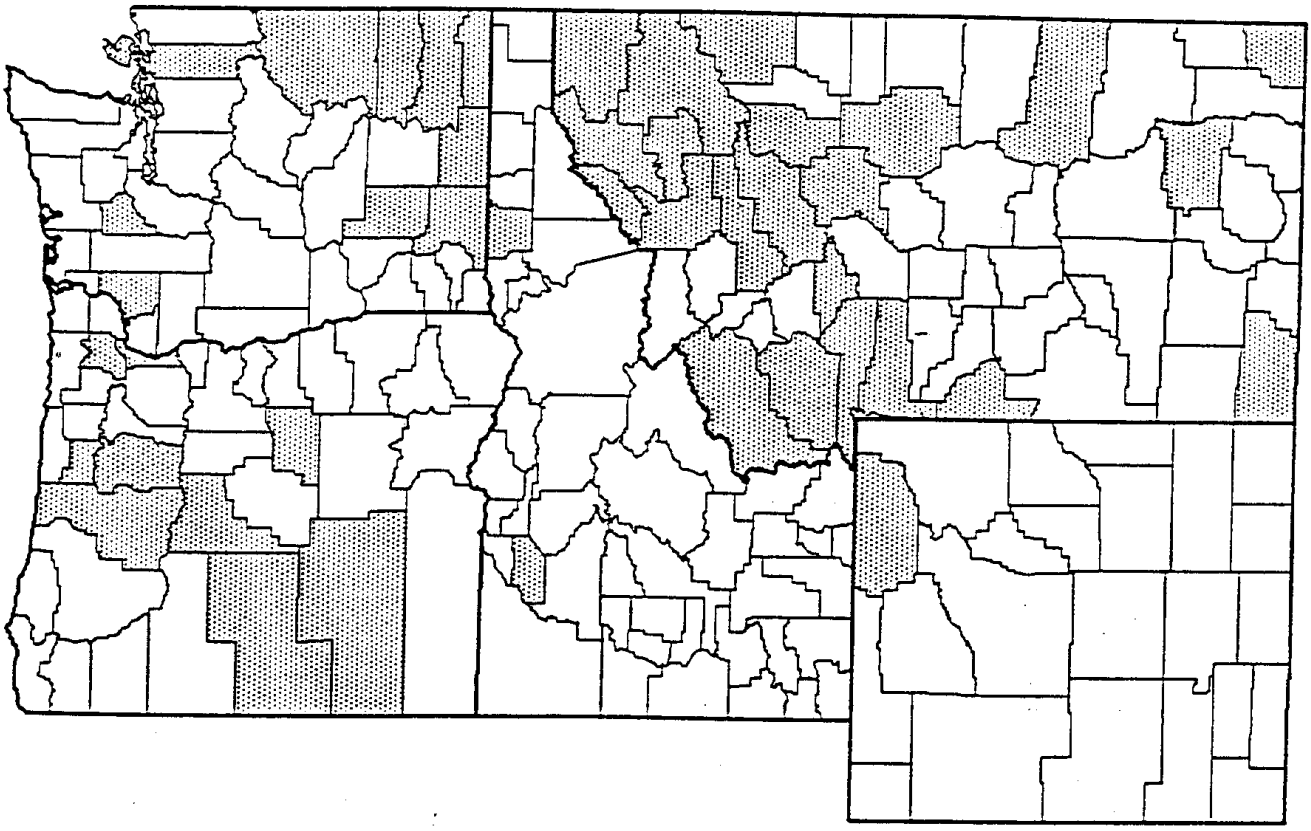


(REL 6.2) COUNTIES REPORTING MYRIOPHYLLUM BRASILIENSE (PARROTFEATHER), 1875-1995.

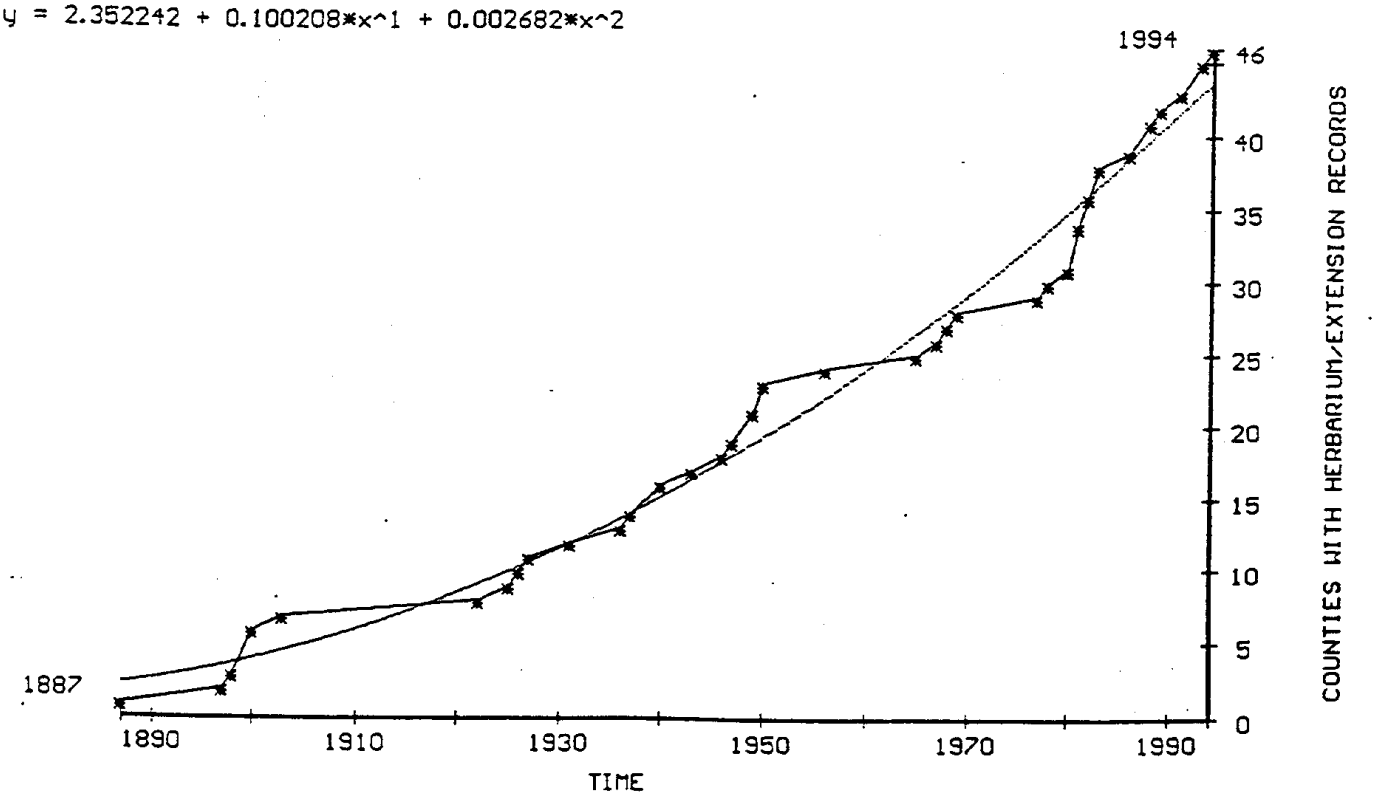




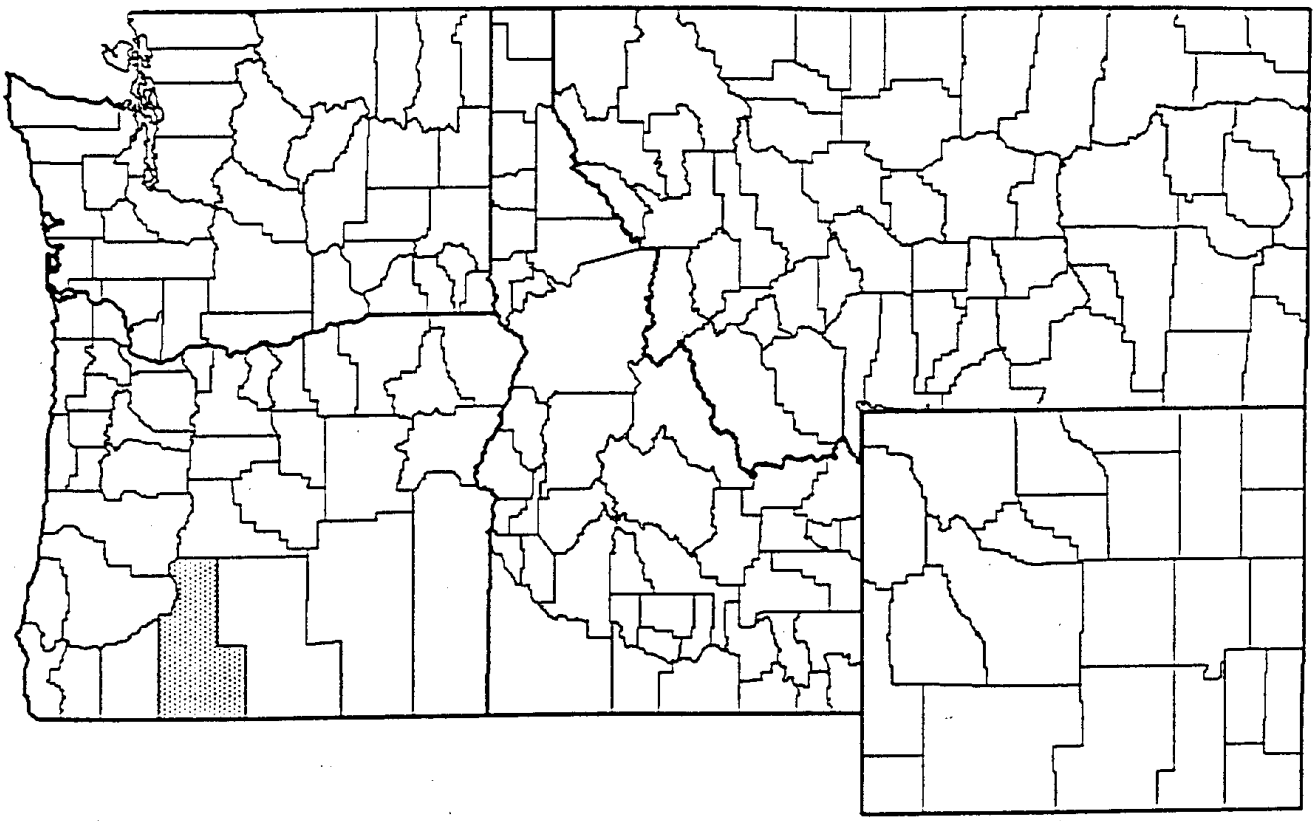
(REL 6.2) COUNTIES REPORTING MYRIOPHYLLUM SPICATUM (AMERICAN WATER MILFOIL), 1875-1995.



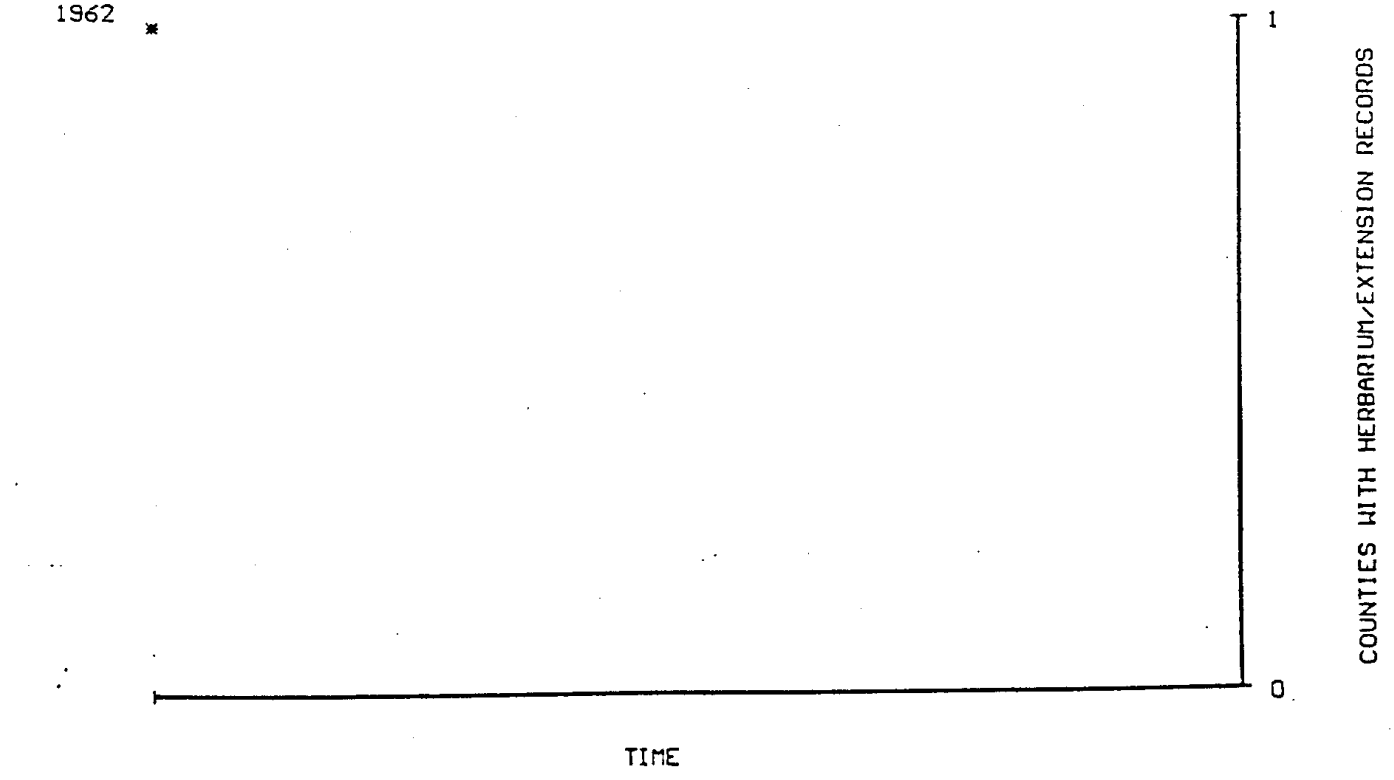
MYRIOPHYLLUM SPICATUM INCREASE IN NORTHWEST STATES
y = 2.352242 + 0.100208*x^1 + 0.002682*x^2



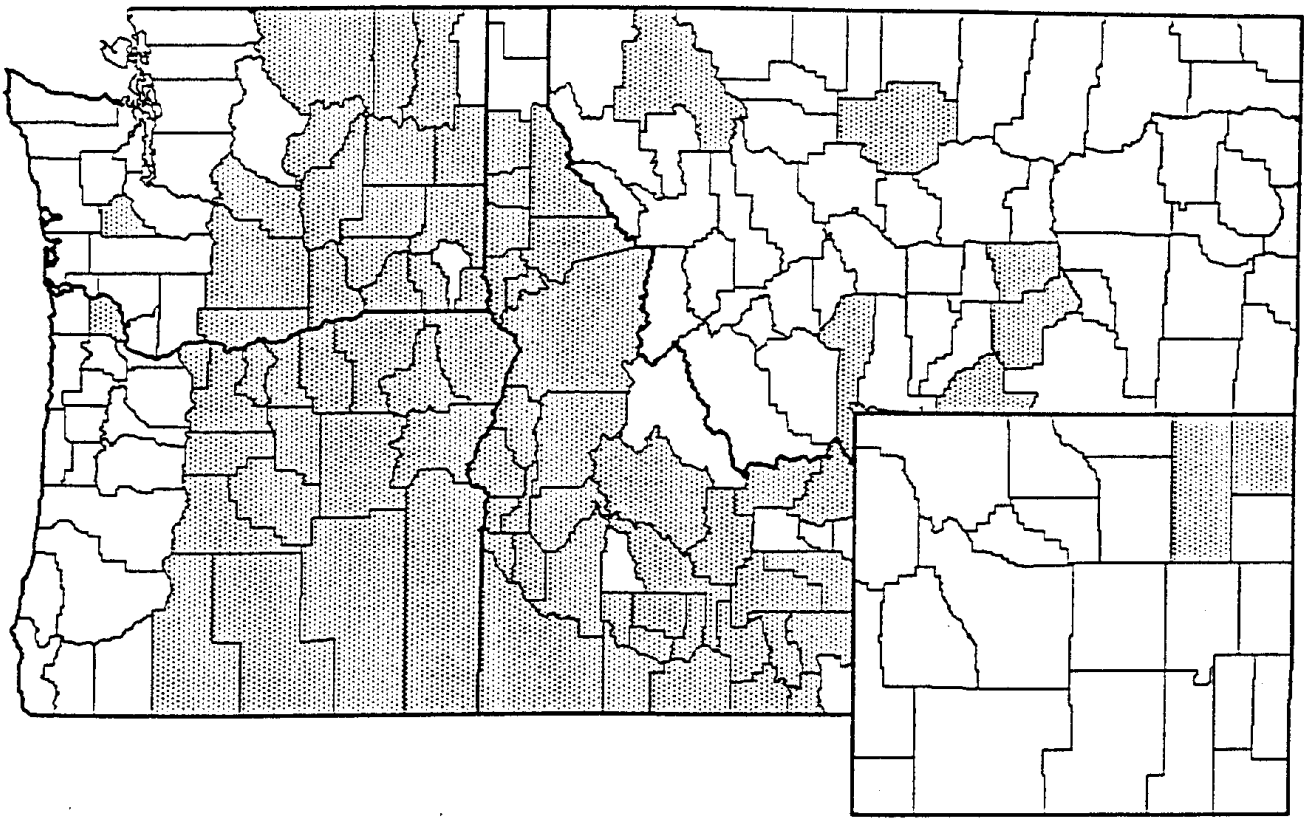
(REL 6.2) COUNTIES REPORTING NARDUS STRICTA (MOOR MATGRASS), 1875-1995.

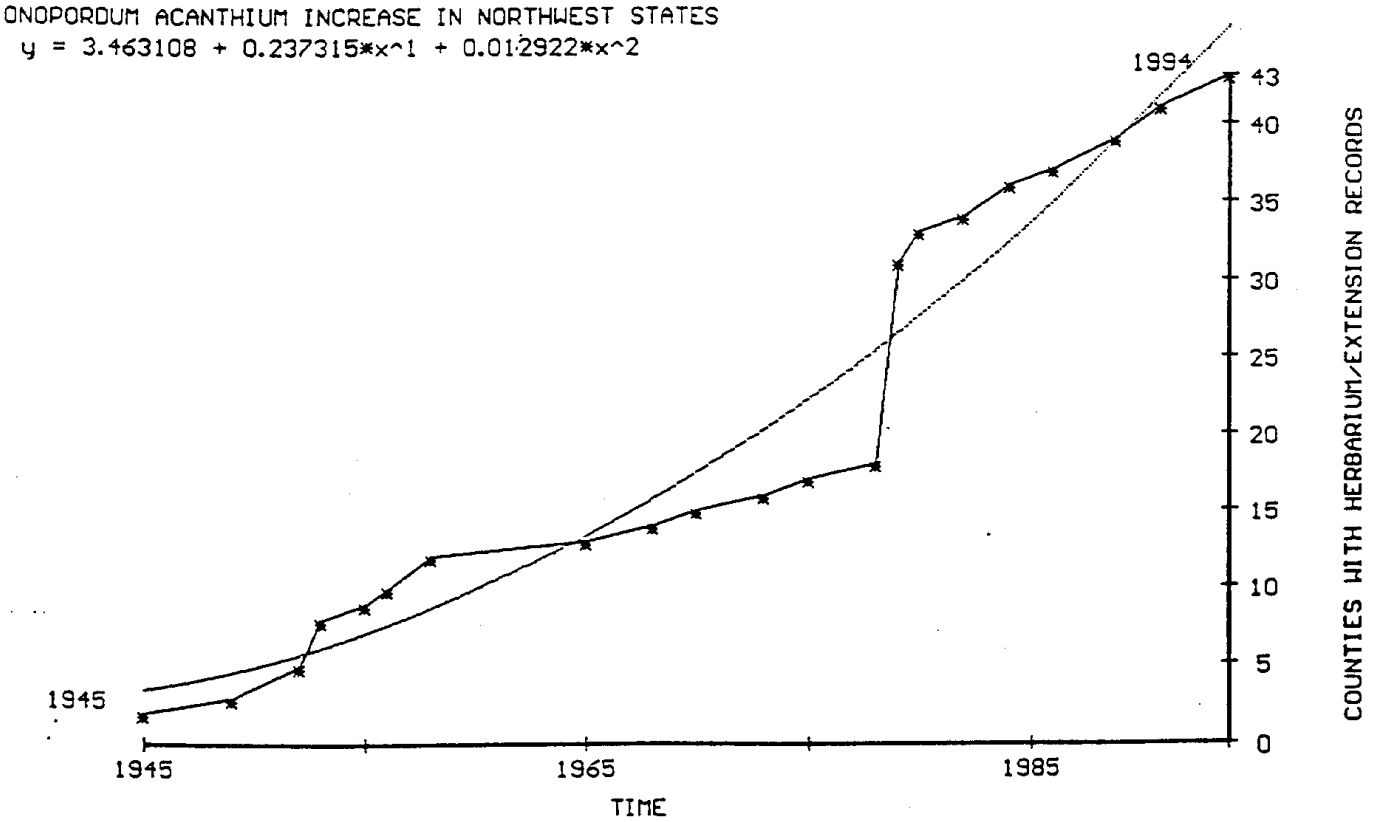


NARDUS STRICTA INCREASE IN NORTHWEST STATES

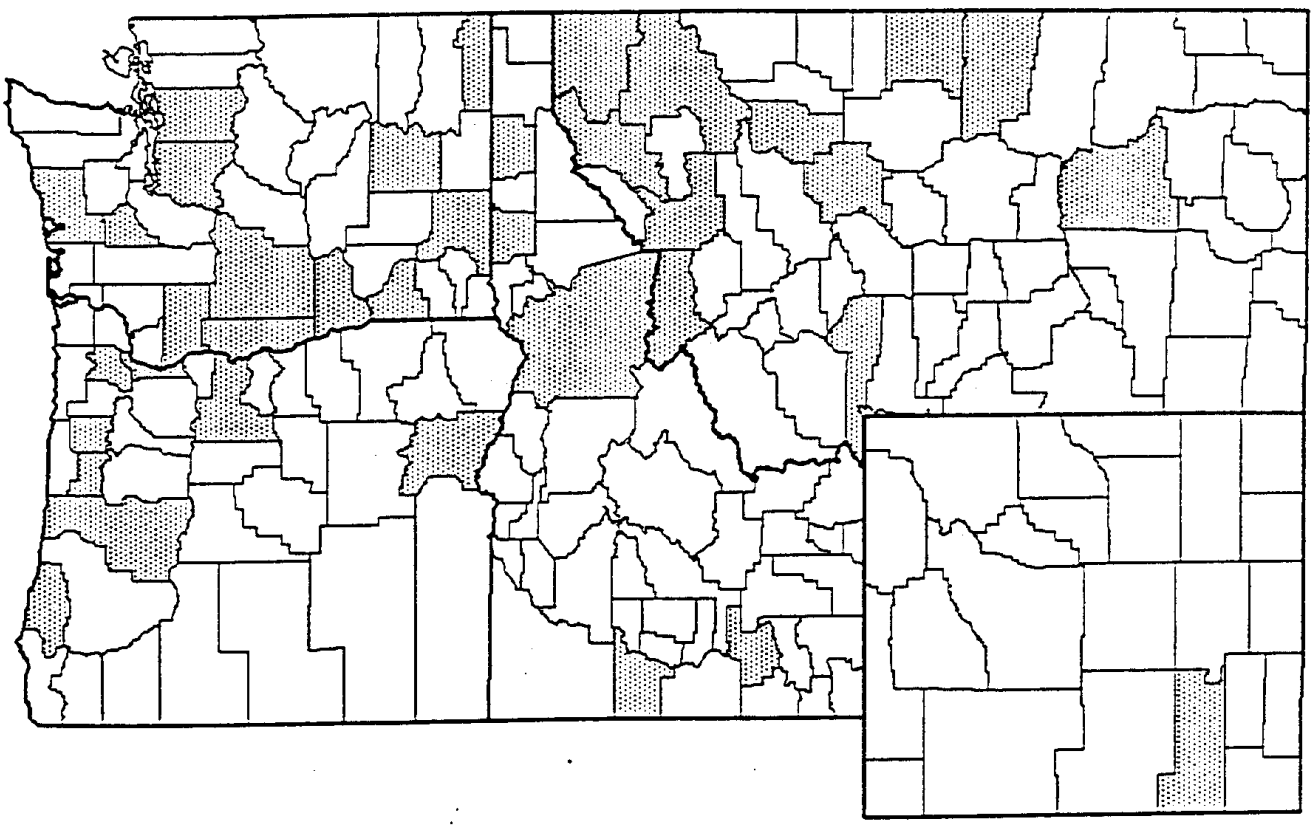


(REL 6.2) COUNTIES REPORTING ONOPORDUM ACANTHIUM (SCOTCH THISTLE), 1875-1995.



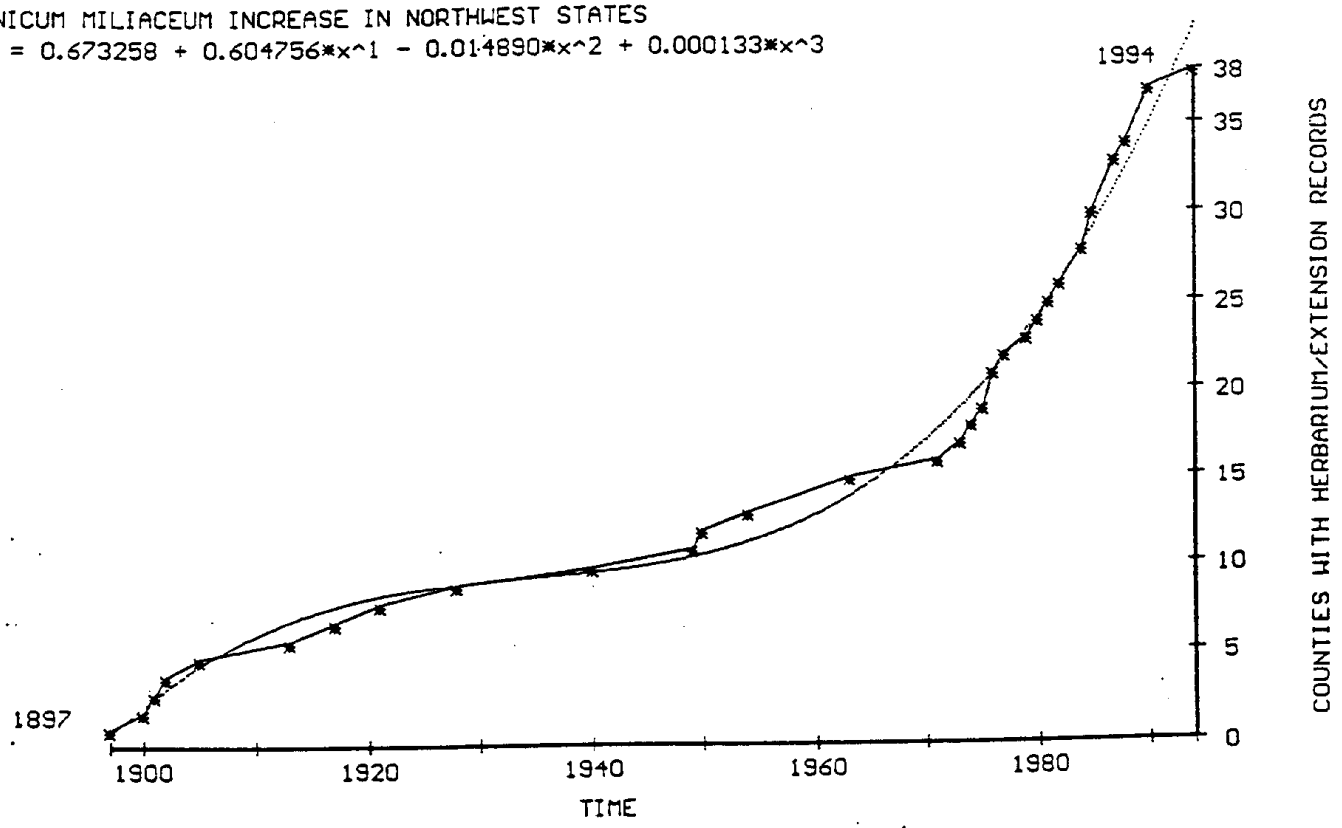


(REL 6.2) COUNTIES REPORTING PANICUM MILIACEUM (WILD PROSO MILLET), 1875-1995.

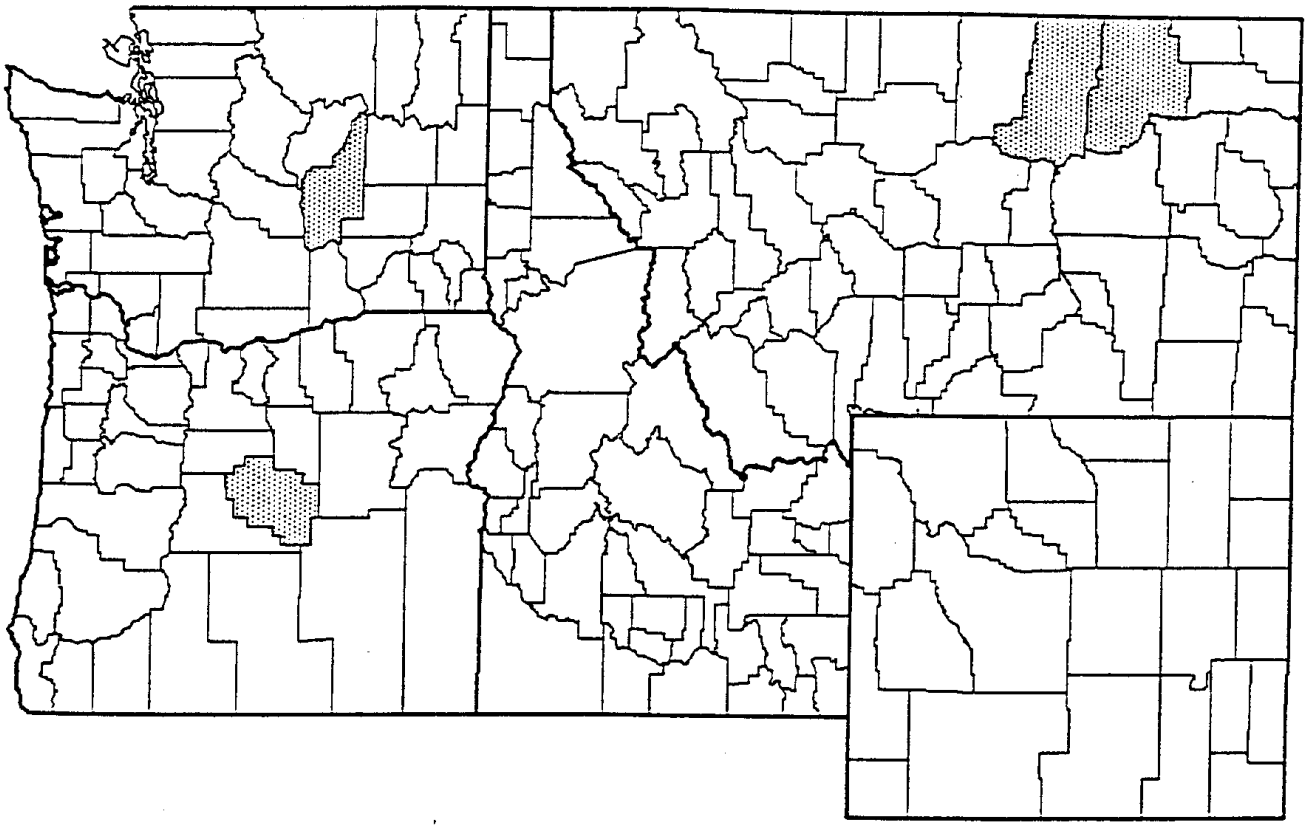


PANICUM MILIACEUM INCREASE IN NORTHWEST STATES

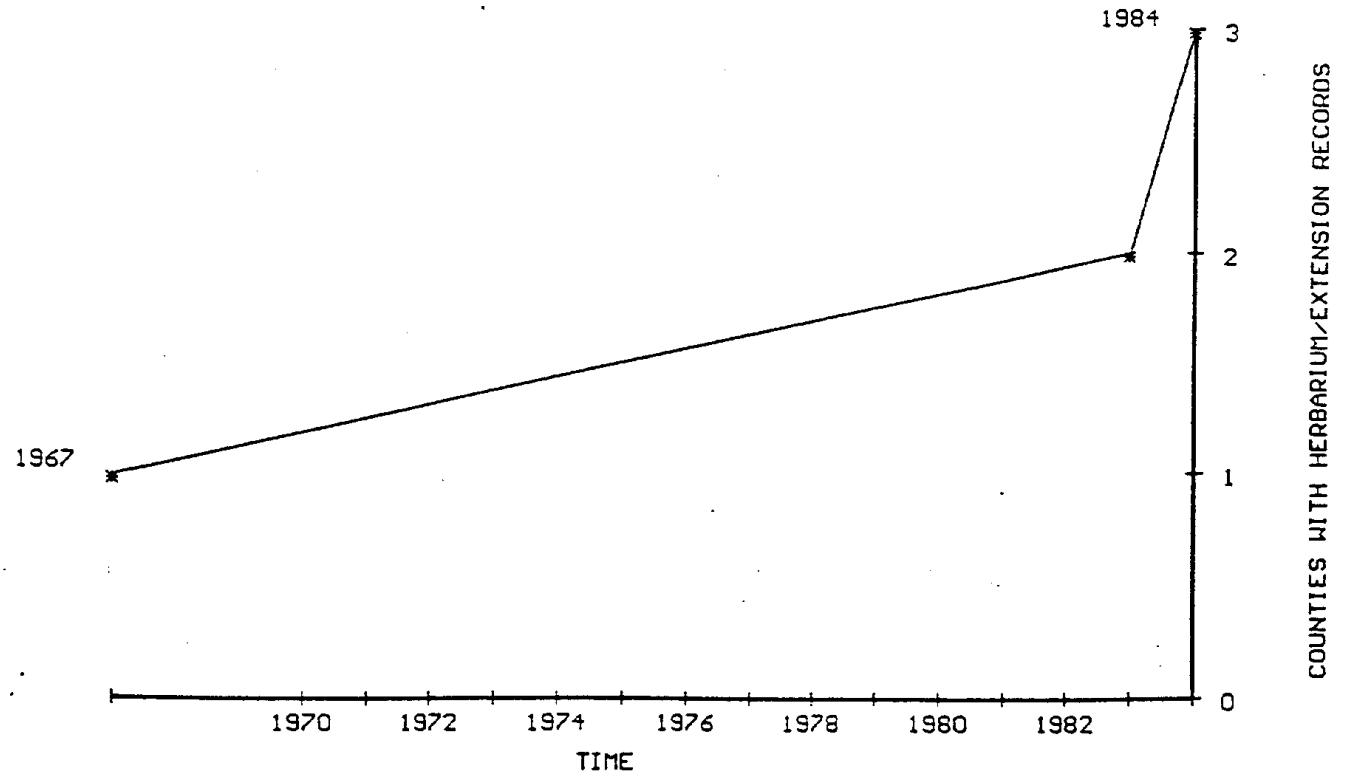
y = 0.673258 + 0.604756*x^1 - 0.014890*x^2 + 0.000133*x^3



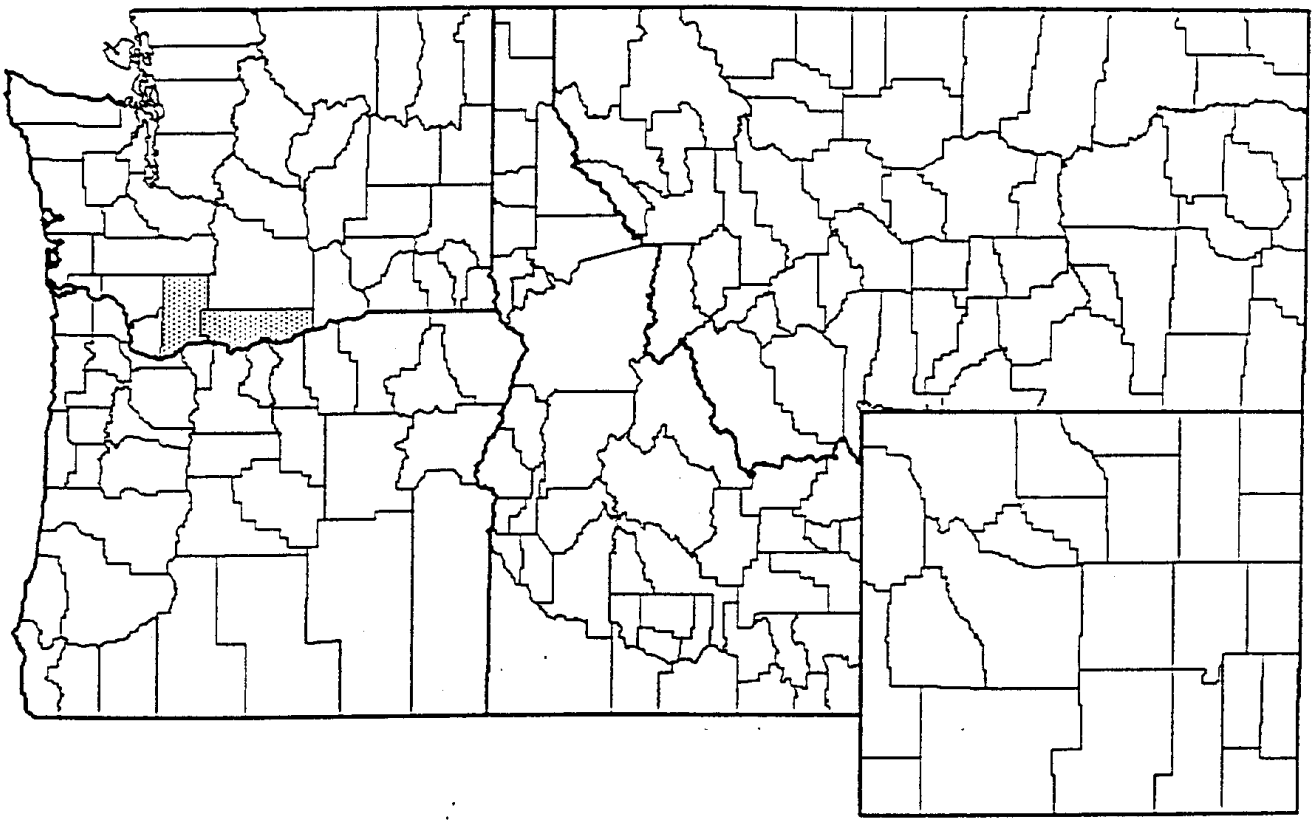
(REL 6.2) COUNTIES REPORTING PEGANUM HARMALA (AFRICAN RUE), 1875-1995.



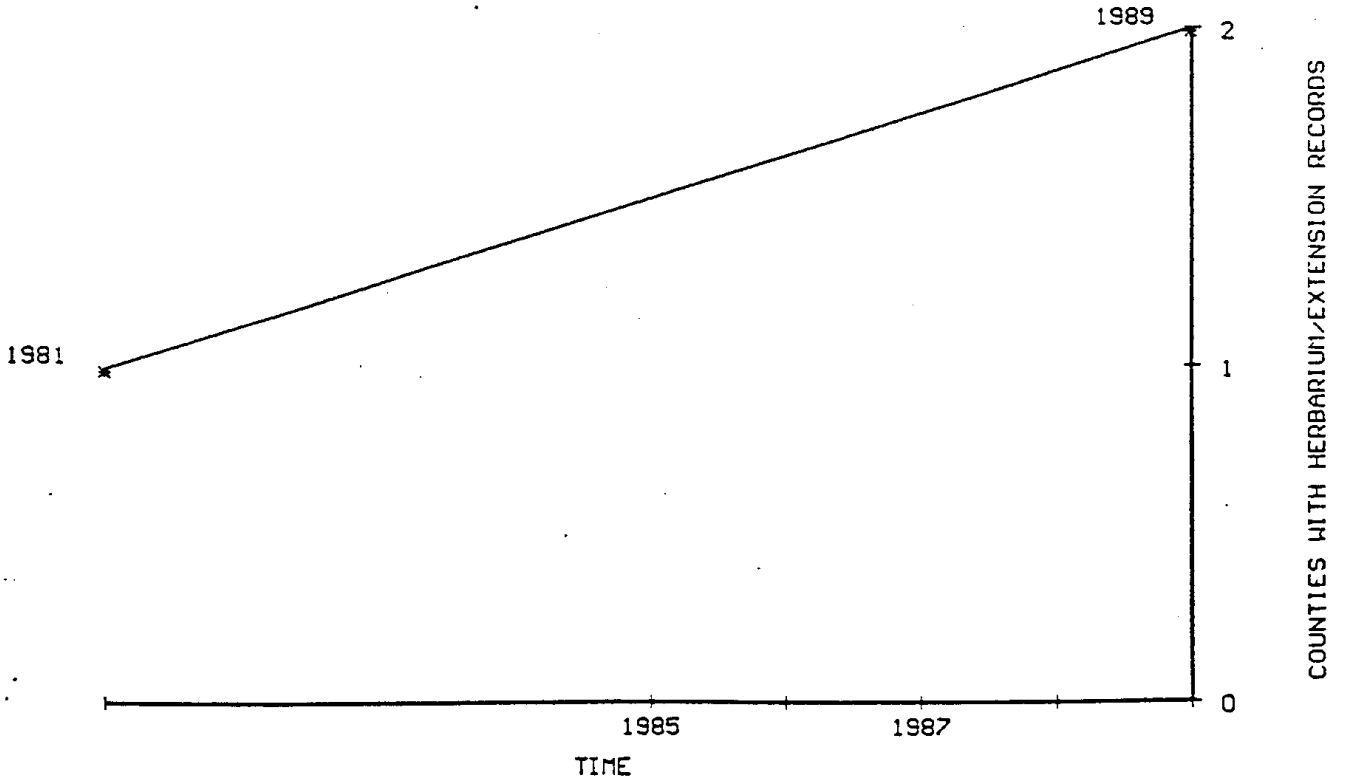
PEGANUM HARMALA INCREASE IN NORTHWEST STATES



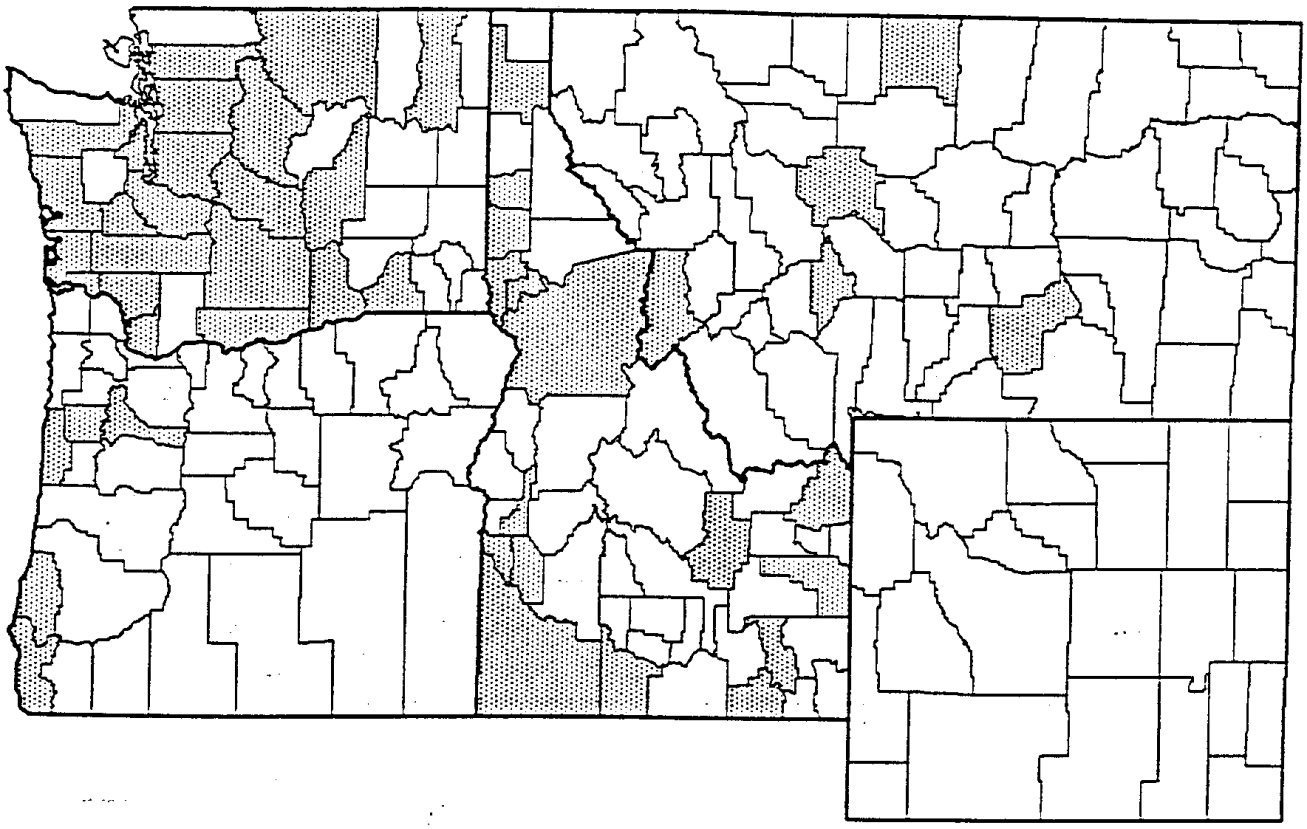
(REL 6.2) COUNTIES REPORTING PICRIS HIERACOIDES (BITTERWEED), 1875-1995.



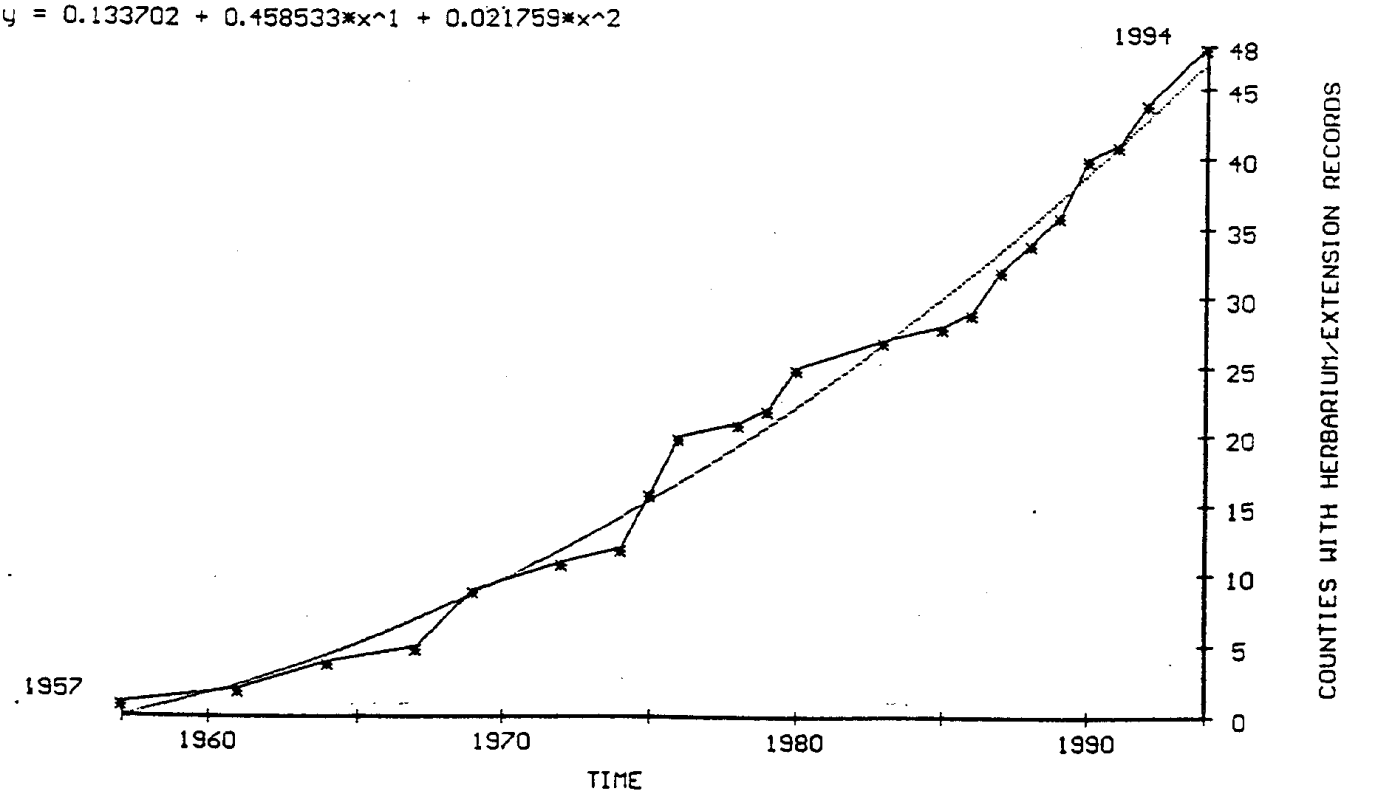
PICRIS HIERACOIDES INCREASE IN NORTHWEST STATES



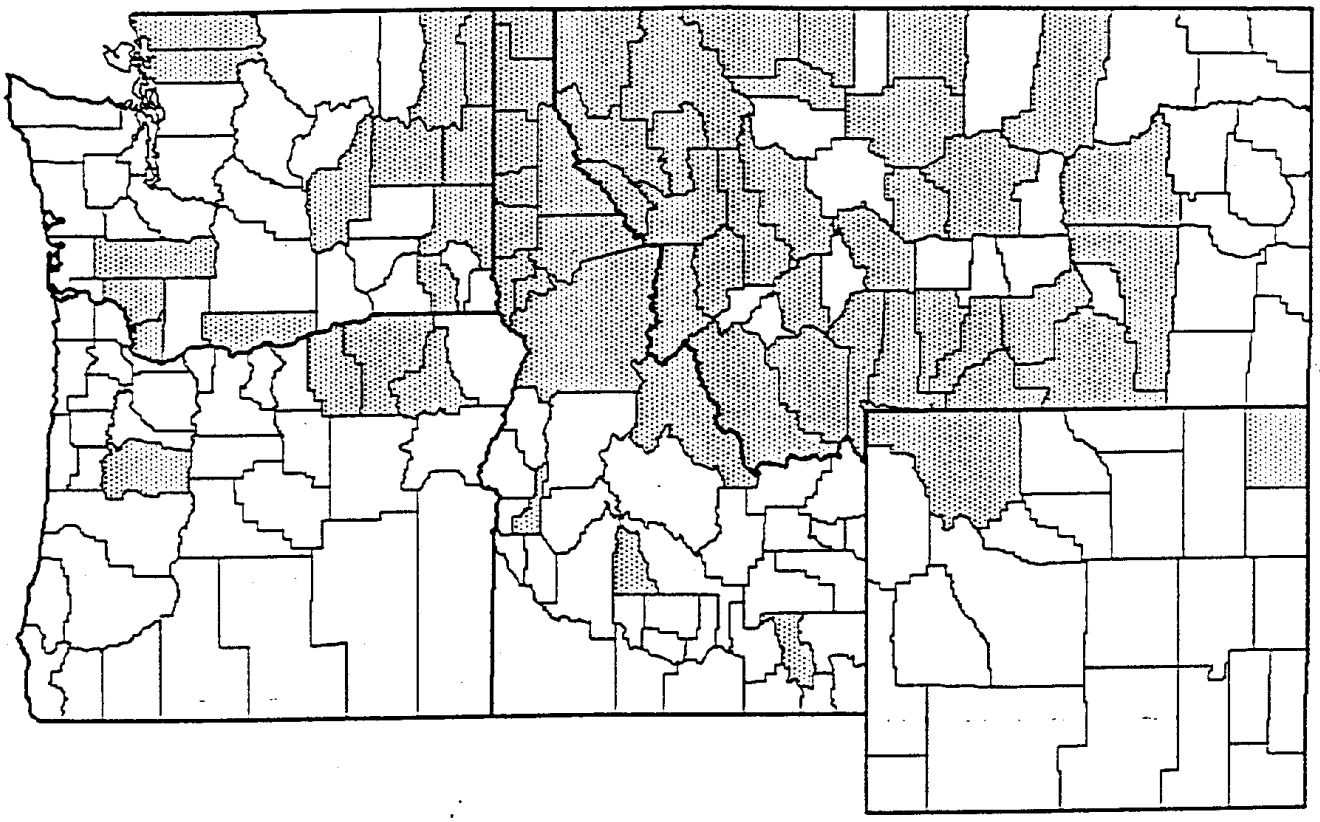
(REL 6.2) COUNTIES REPORTING POLYGONUM CUSPIDATUM (JAPANESE KNOTWEED), 1875-1995.



POLYGONUM CUSPIDATUM INCREASE IN NORTHWEST STATES
y = 0.133702 + 0.458533*x^1 + 0.021759*x^2

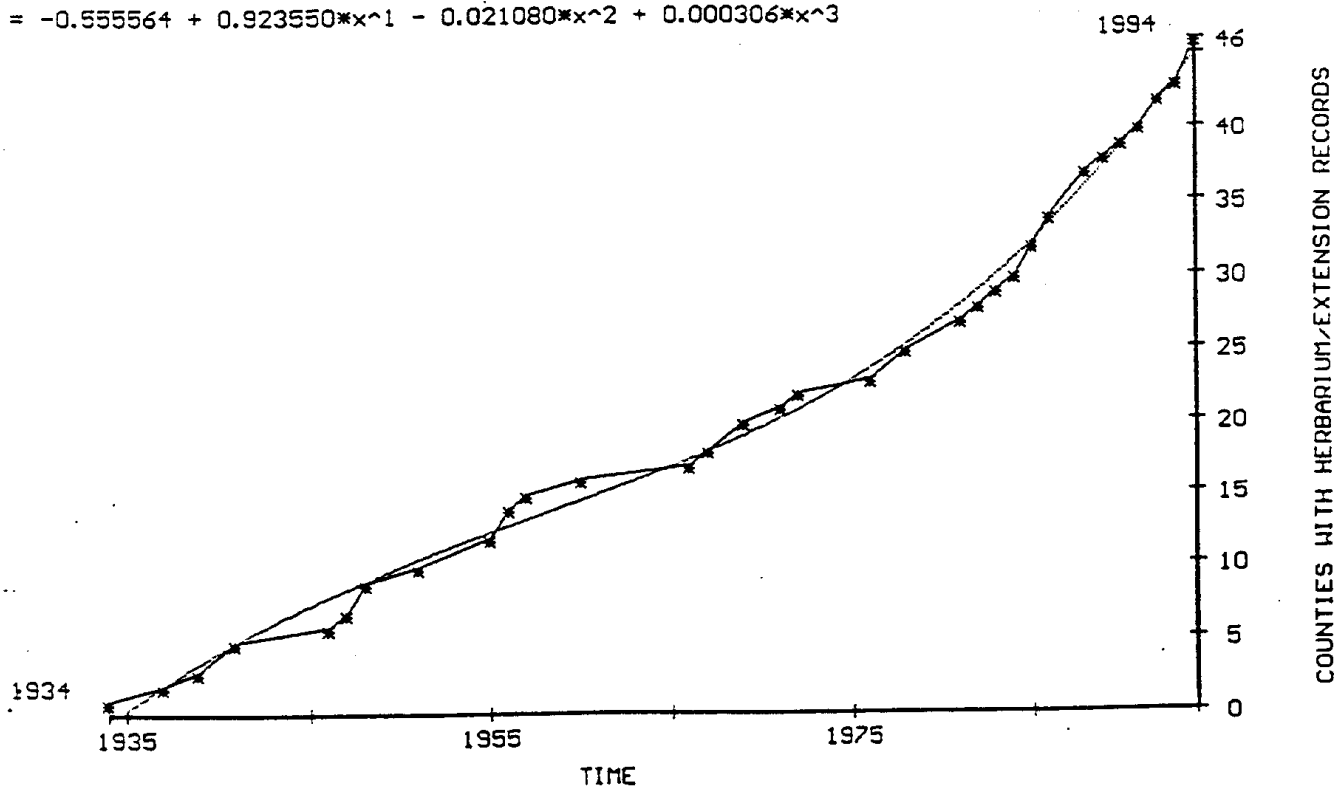


(REL 6.2) COUNTIES REPORTING POTENTILLA RECTA (SULFUR CINQUEFOIL), 1875-1995.

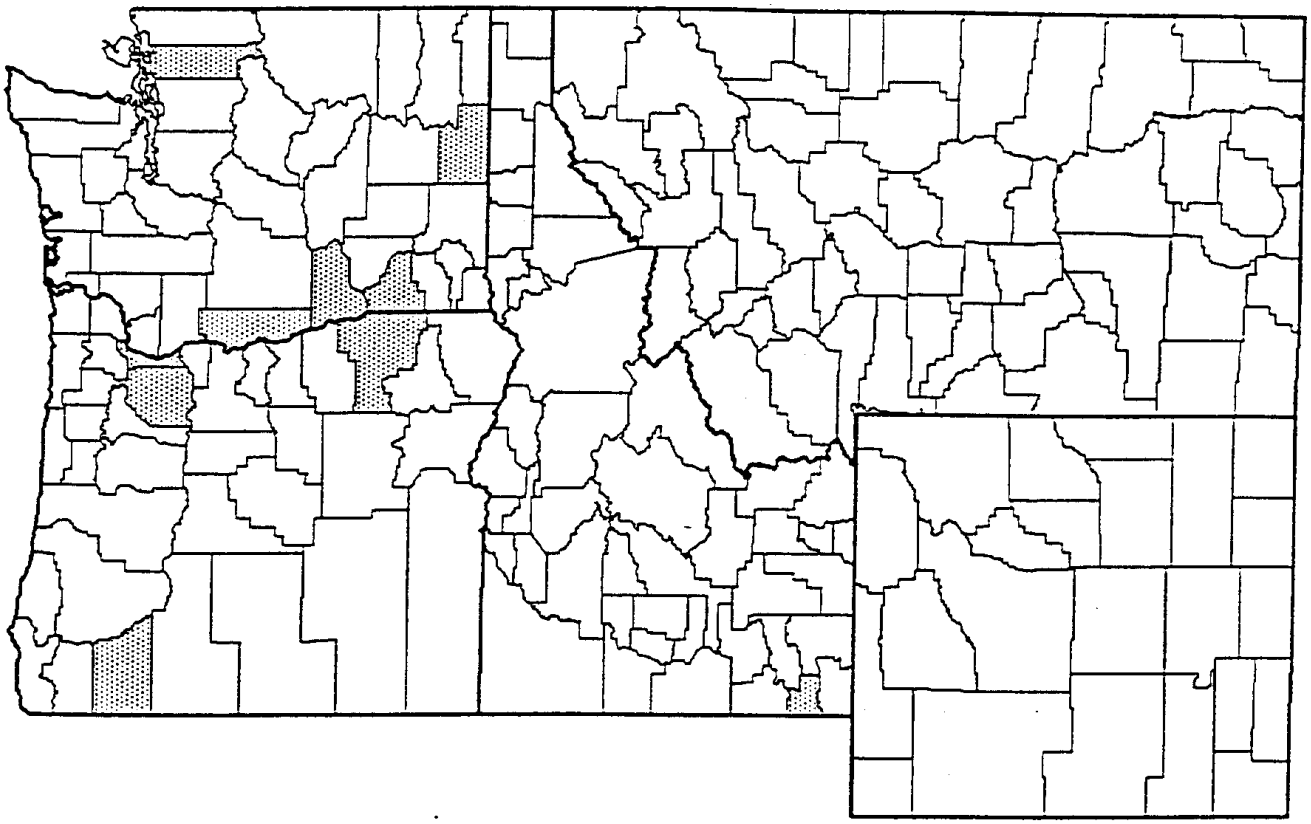


POTENTILLA RECTA INCREASE IN NORTHWEST STATES

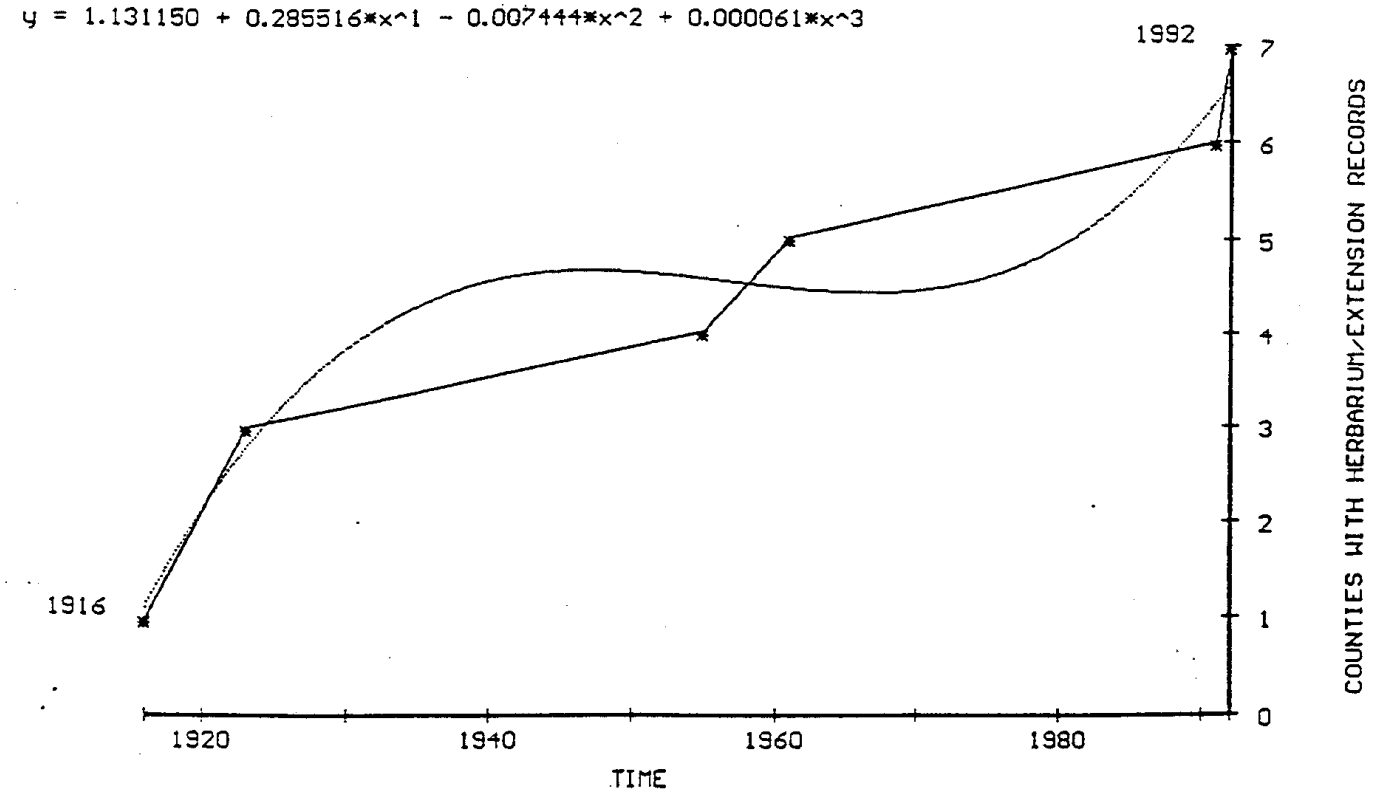
y = -0.555564 + 0.923550*x^1 - 0.021080*x^2 + 0.000306*x^3



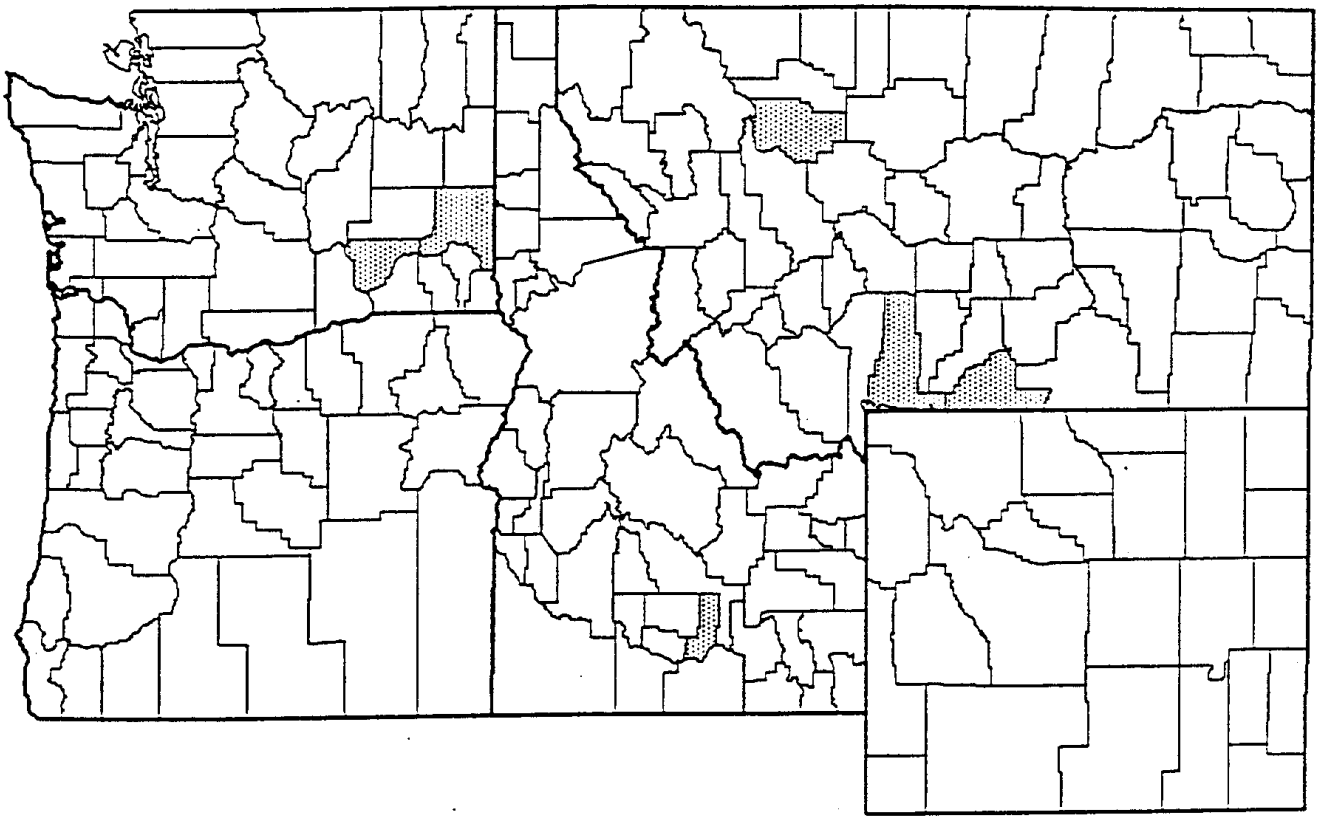
(REL 6.2) COUNTIES REPORTING PROBOSCIDEA LOUISIANICA (DEVIL'S CLAW), 1875-1995.



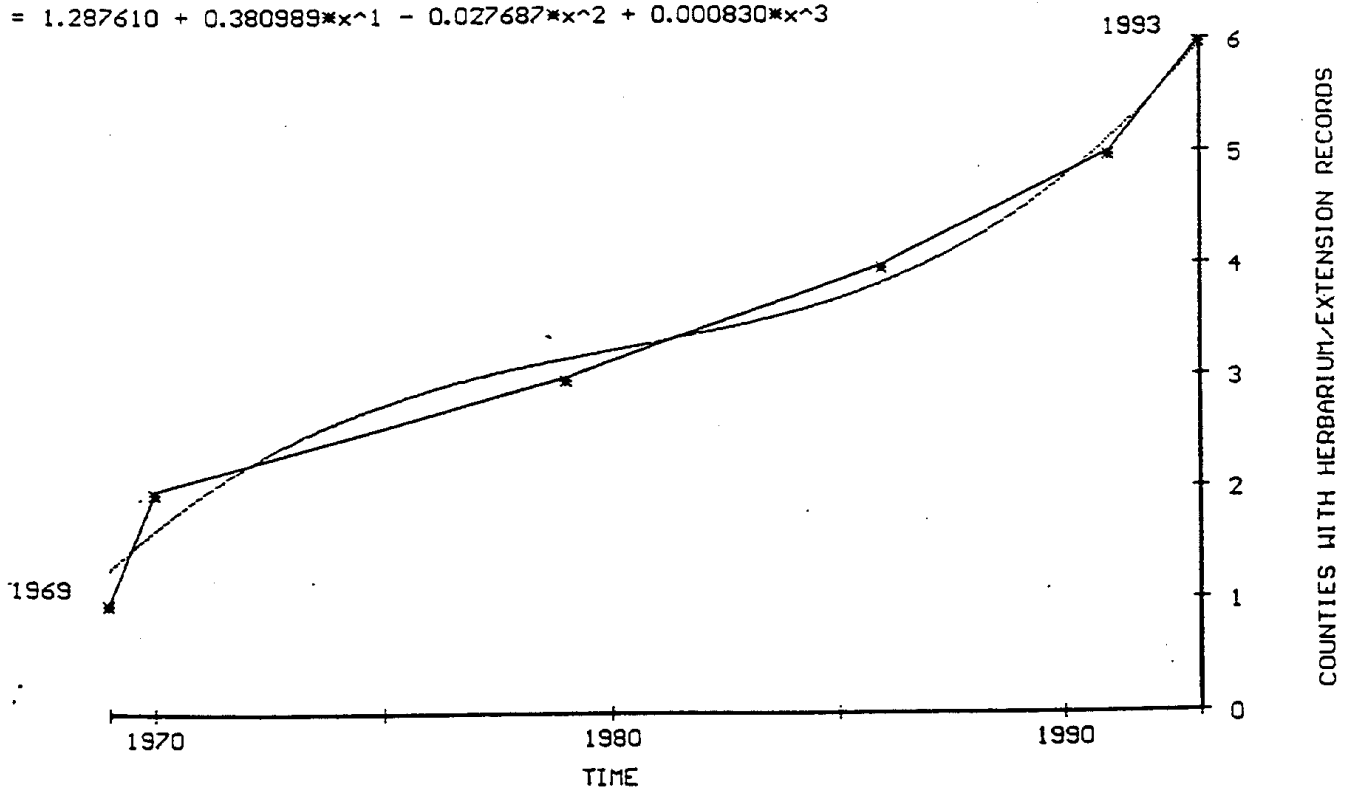
PROBOSCIDEA LOUISIANICA INCREASE IN NORTHWEST STATES
y = 1.131150 + 0.285516*x^1 - 0.007444*x^2 + 0.000061*x^3



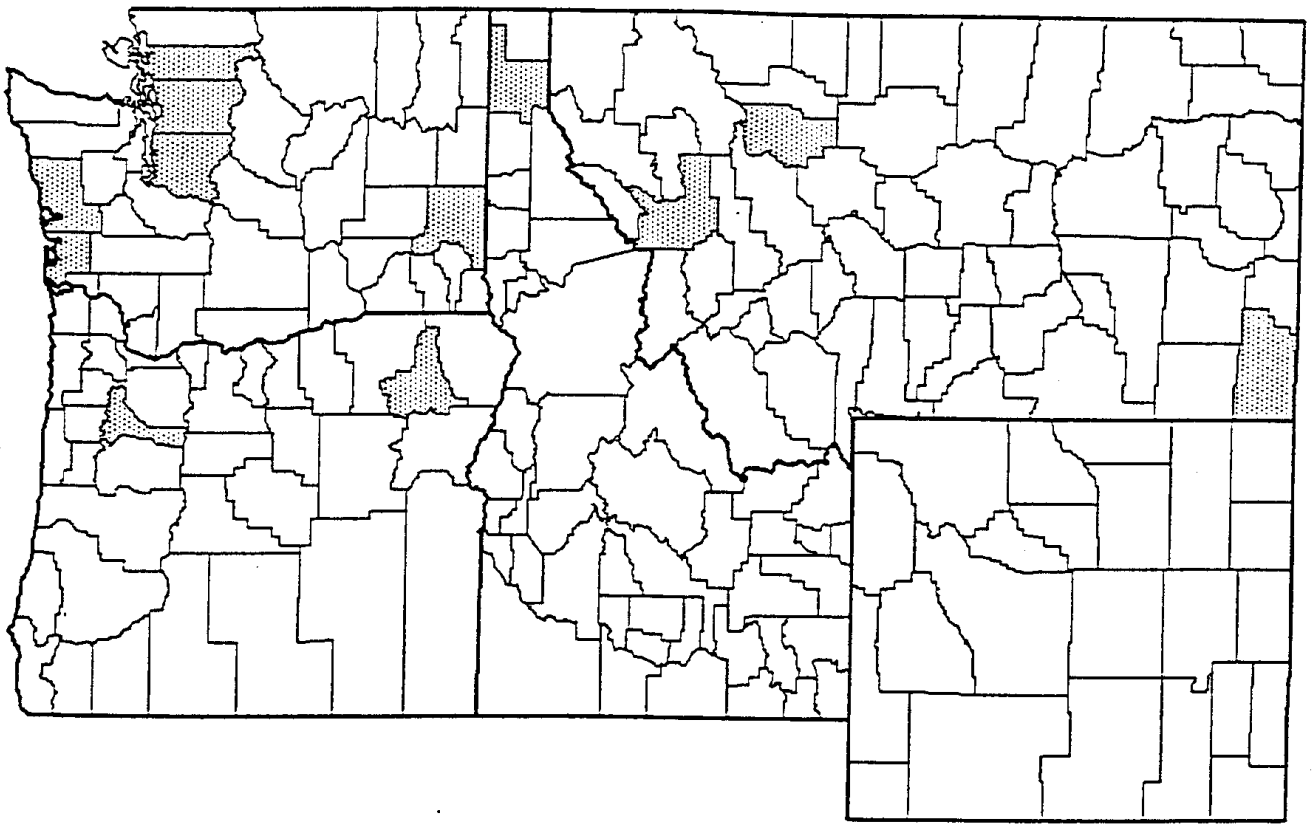
(REL 6.2) COUNTIES REPORTING RORIPPA AUSTRIACA (AUSTRIAN FIELDCRESS), 1875-1995.



RORIPPA AUSTRIACA INCREASE IN NORTHWEST STATES
y = 1.287610 + 0.380989*x^1 - 0.027687*x^2 + 0.000830*x^3

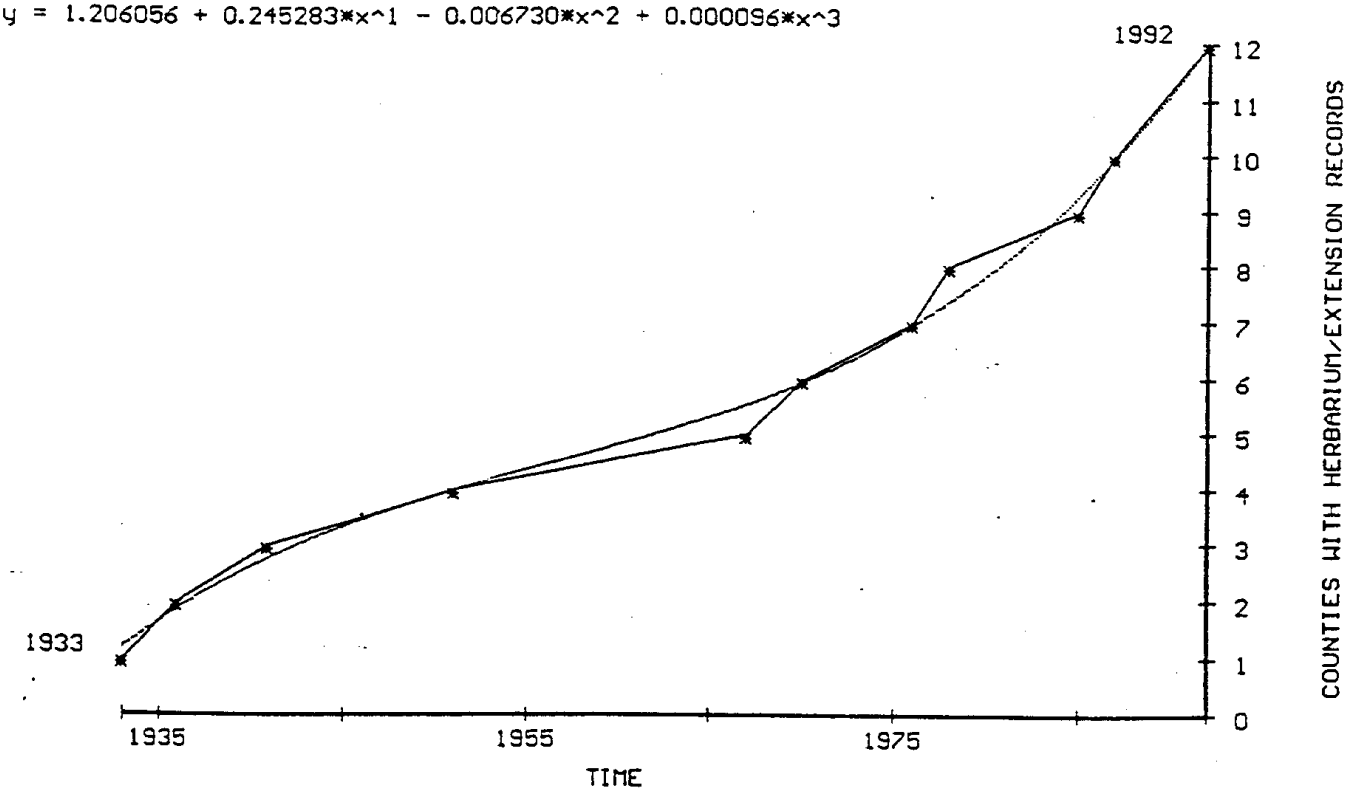


(REL 6.2) COUNTIES REPORTING RORIPPA SYLVESTRIS (YELLOW FIELDCRESS), 1875-1995.

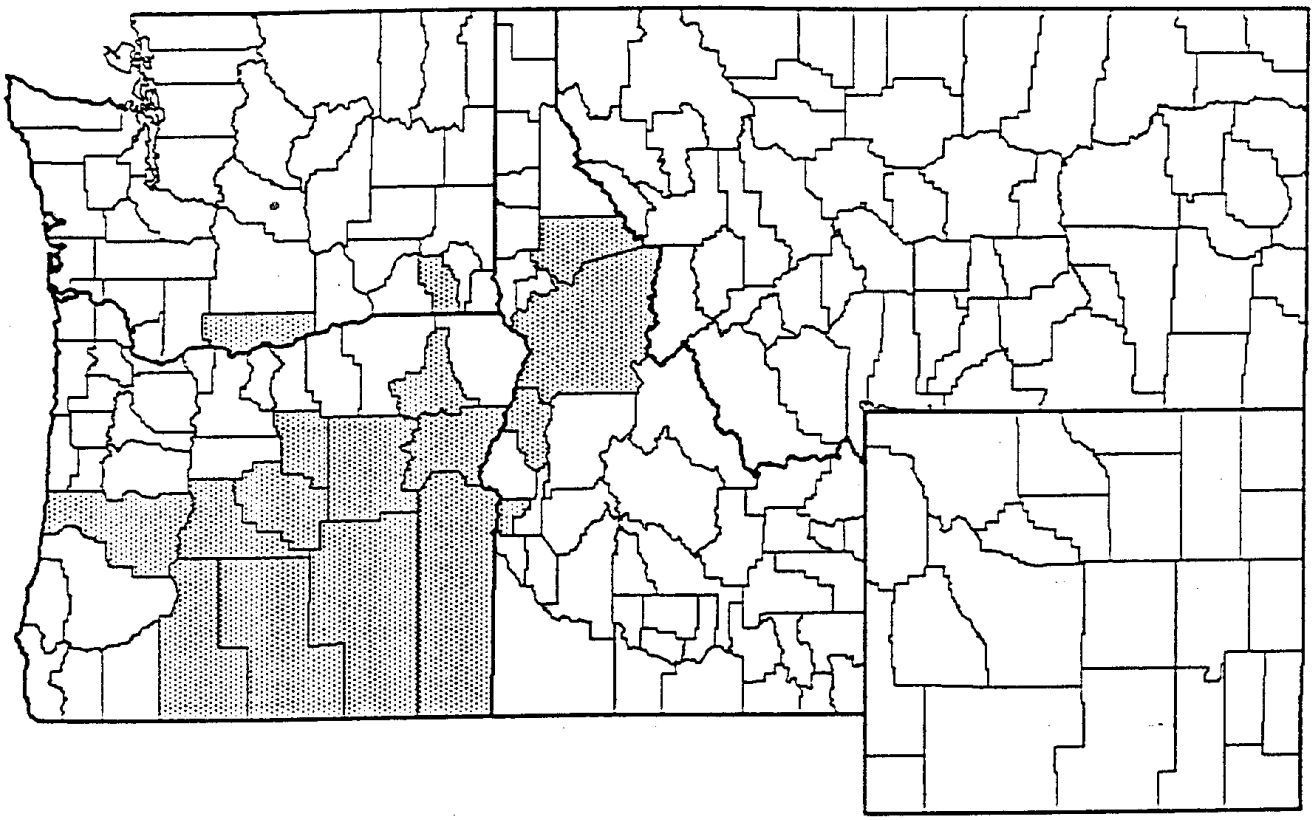


RORIPPA SYLVESTRIS INCREASE IN NORTHWEST STATES

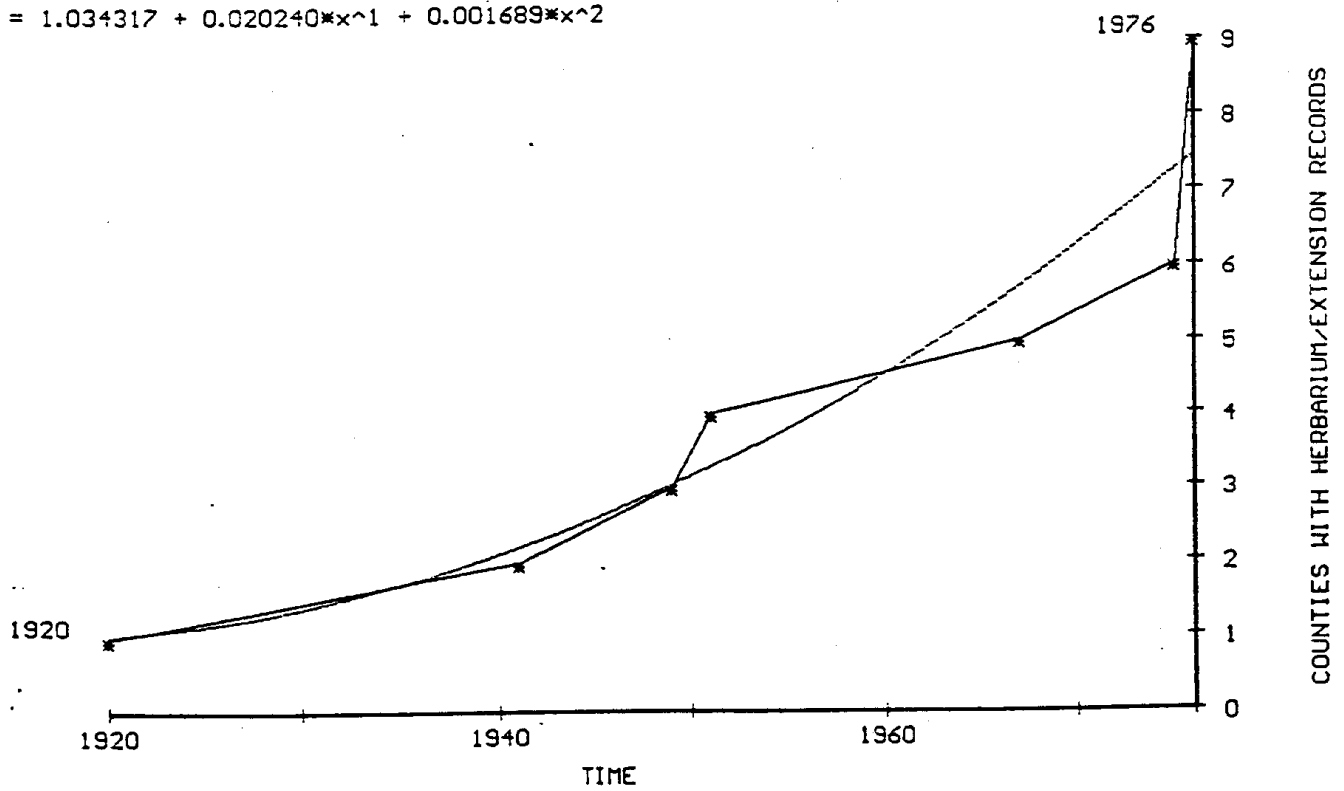
y = 1.206056 + 0.245283*x^1 - 0.006730*x^2 + 0.000096*x^3



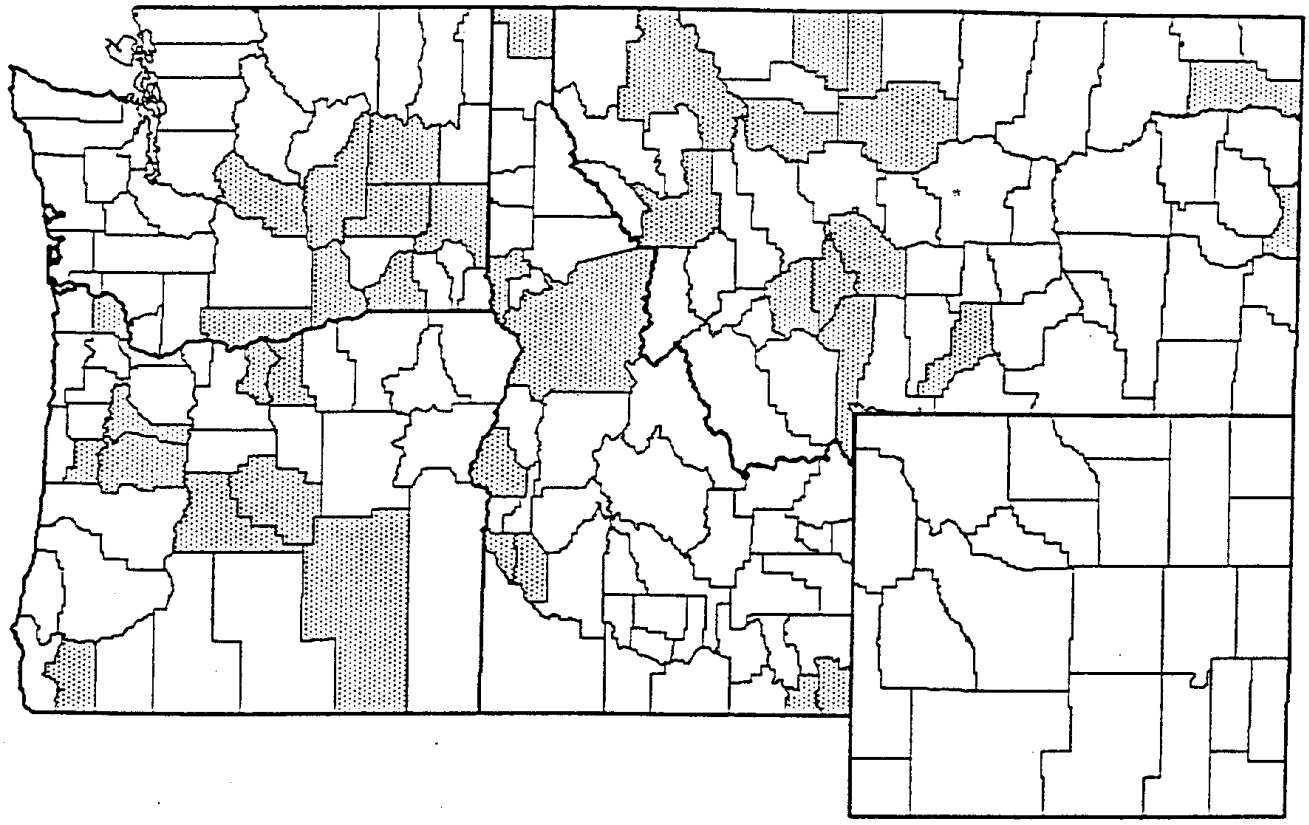
(REL 6.2) COUNTIES REPORTING SALVIA AETHIOPIS (MEDITERRANEAN SAGE), 1875-1995.



SALVIA AETHIOPIS INCREASE IN NORTHWEST STATES
y = 1.034317 + 0.020240*x^1 + 0.001689*x^2

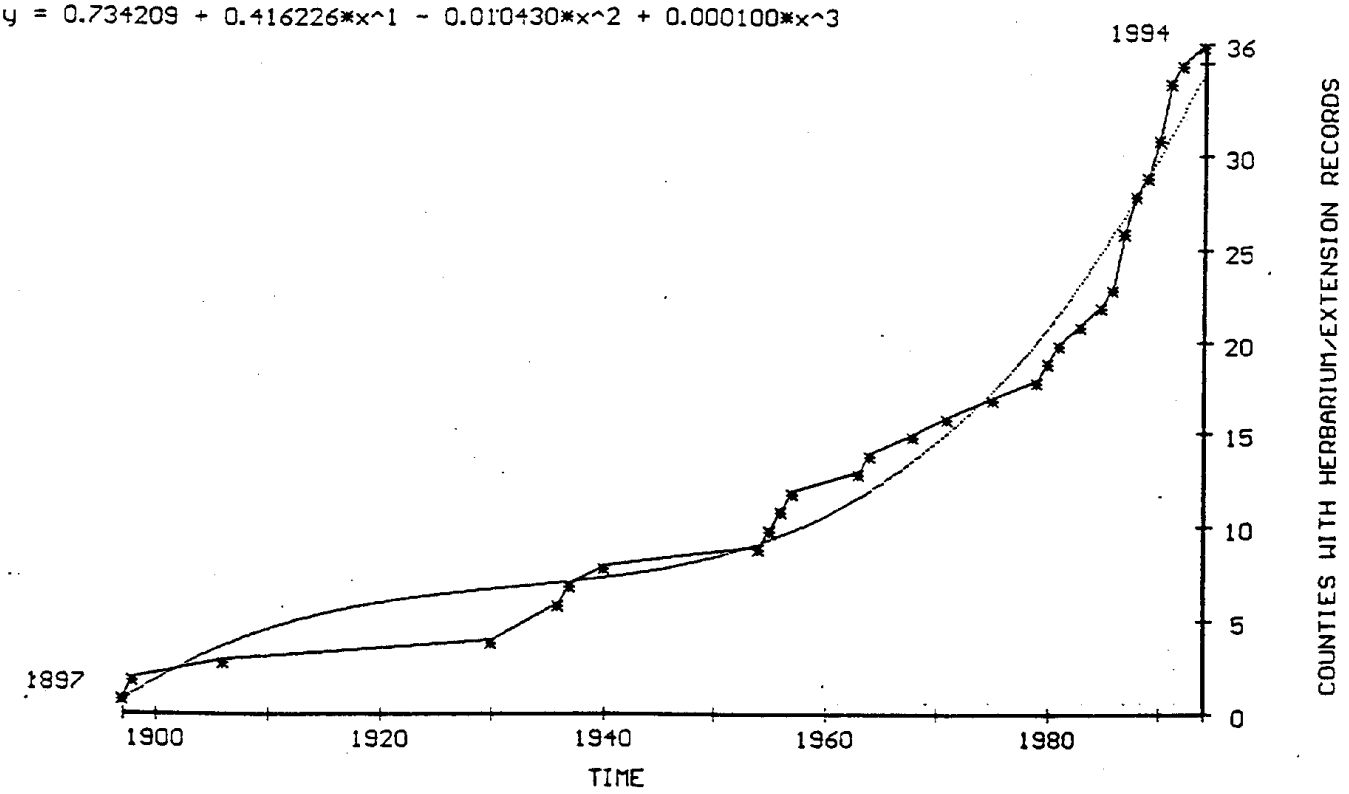


(REL 6.2) COUNTIES REPORTING SECALE CEREALE (CULTIVATED RYE), 1875-1995.

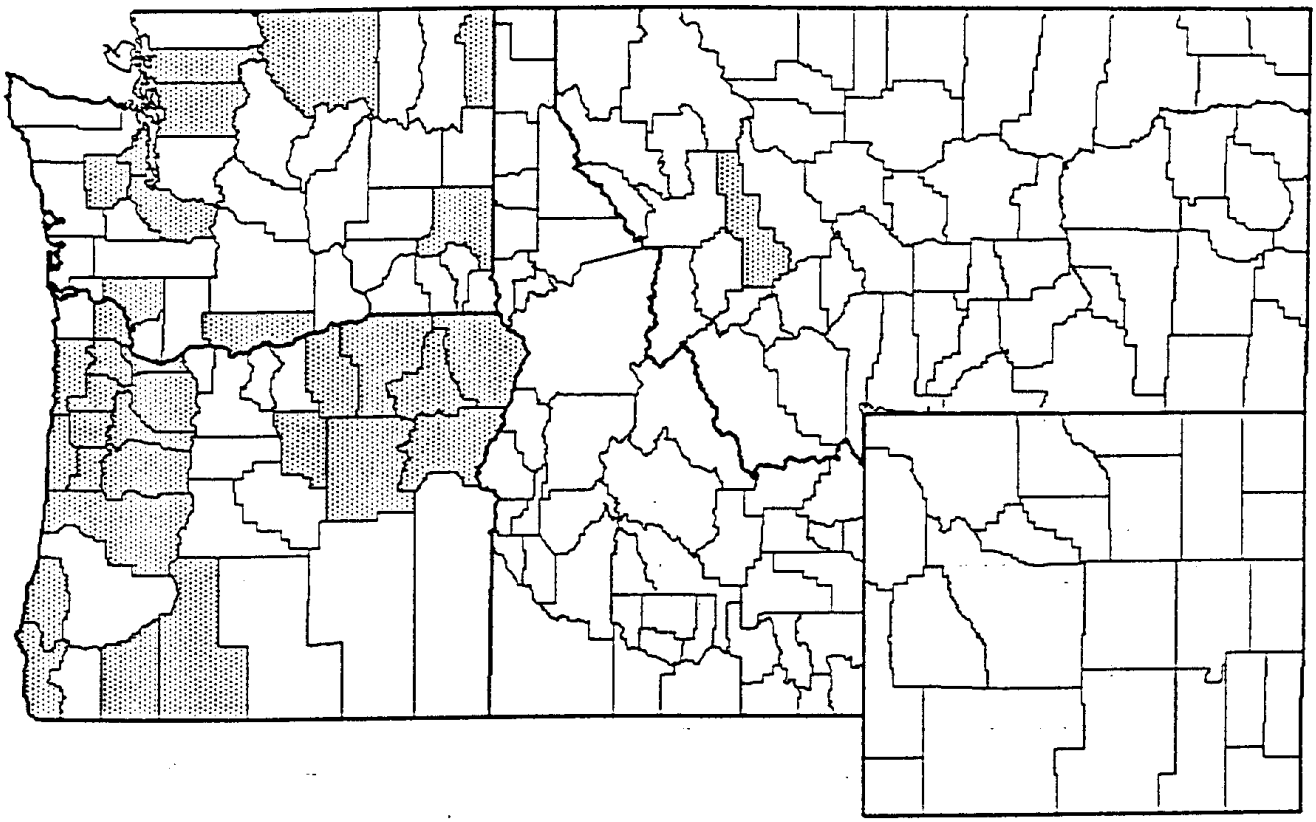


SECALE CEREALE INCREASE IN NORTHWEST STATES

y = 0.734209 + 0.416226*x^1 - 0.010430*x^2 + 0.000100*x^3

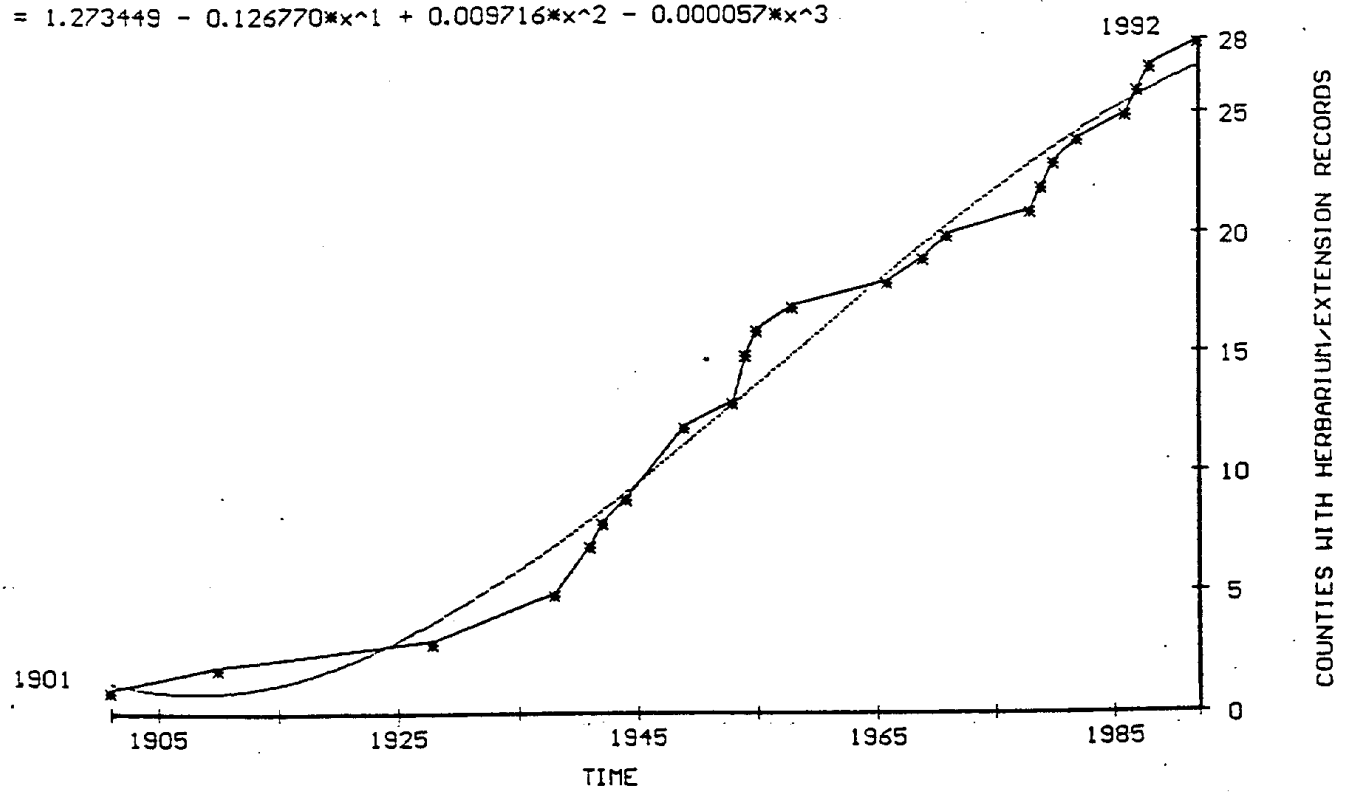


(REL 6.2) COUNTIES REPORTING SENECIO JACOBAEA (TANSY RAGWORT), 1875-1995.

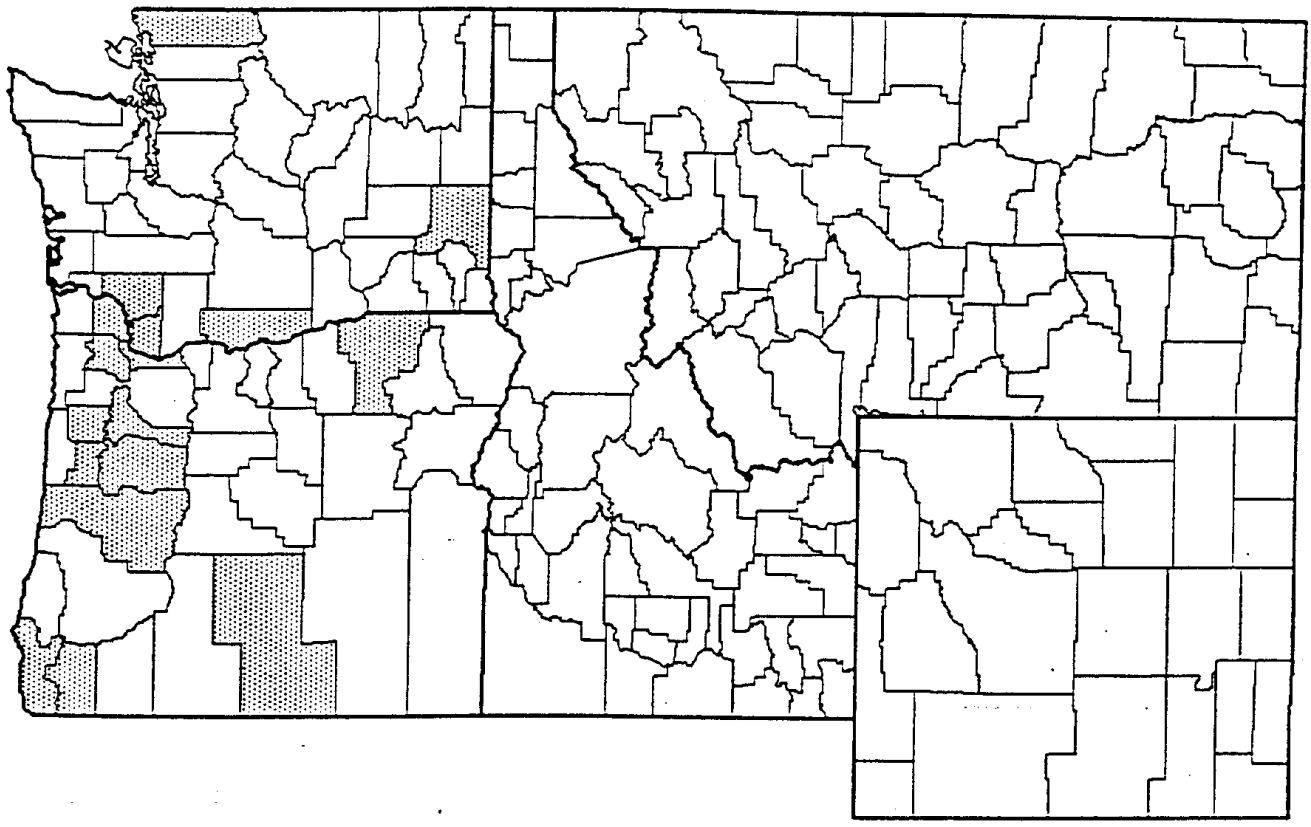


SENECIO JACOBAEA INCREASE IN NORTHWEST STATES

y = 1.273449 - 0.126770*x^1 + 0.009716*x^2 - 0.000057*x^3

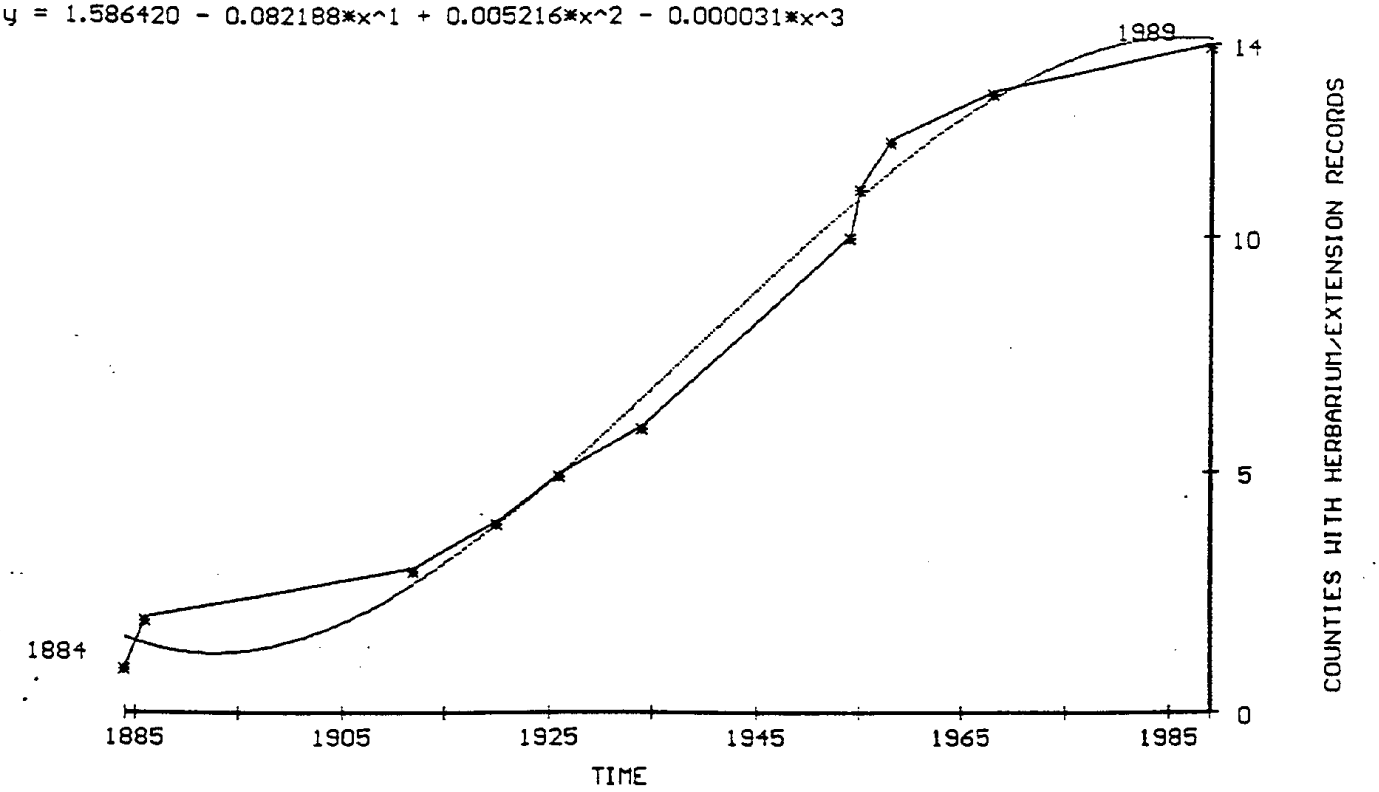


(REL 6.2) COUNTIES REPORTING SILYBUM MARIANUM (BLESSED MILKTHISTLE), 1875-1995.

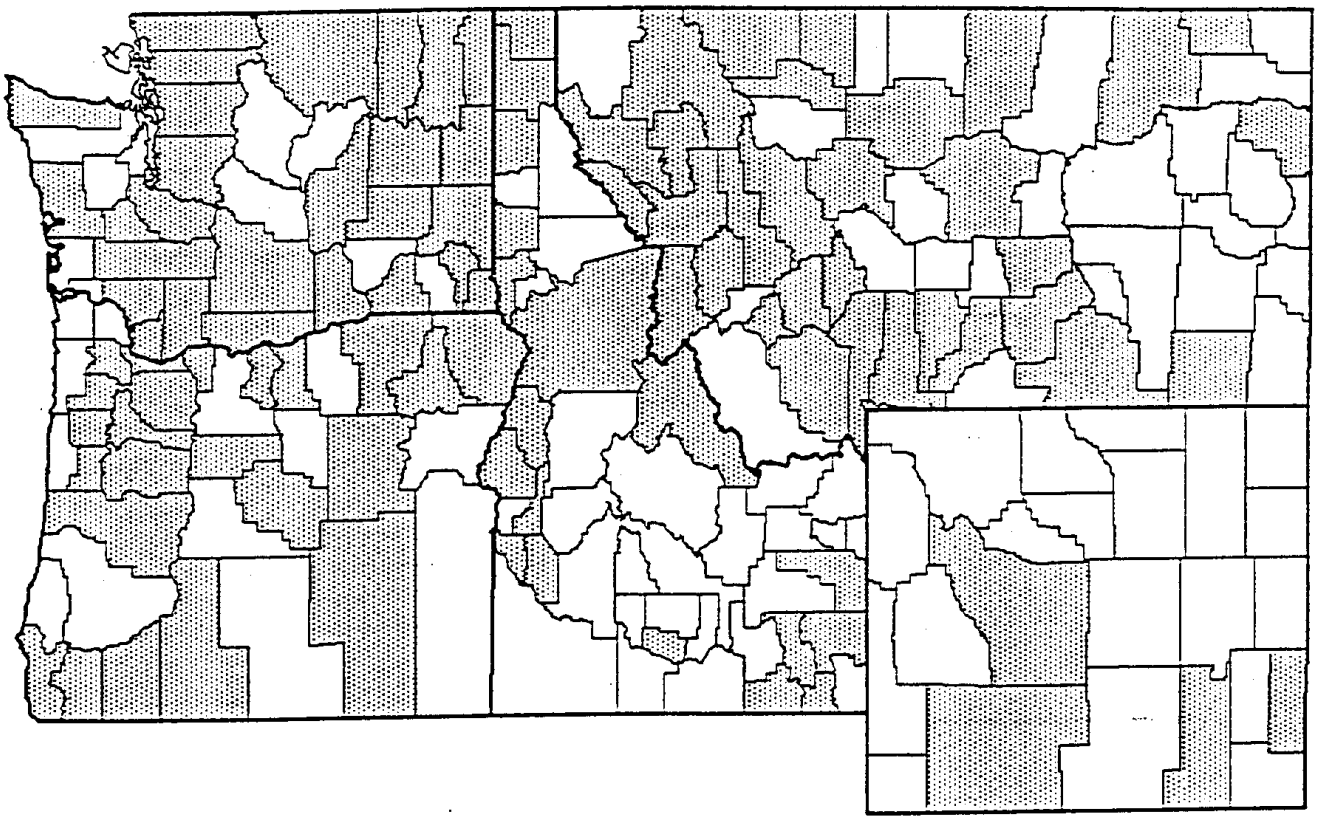


SILYBUM MARIANUM INCREASE IN NORTHWEST STATES

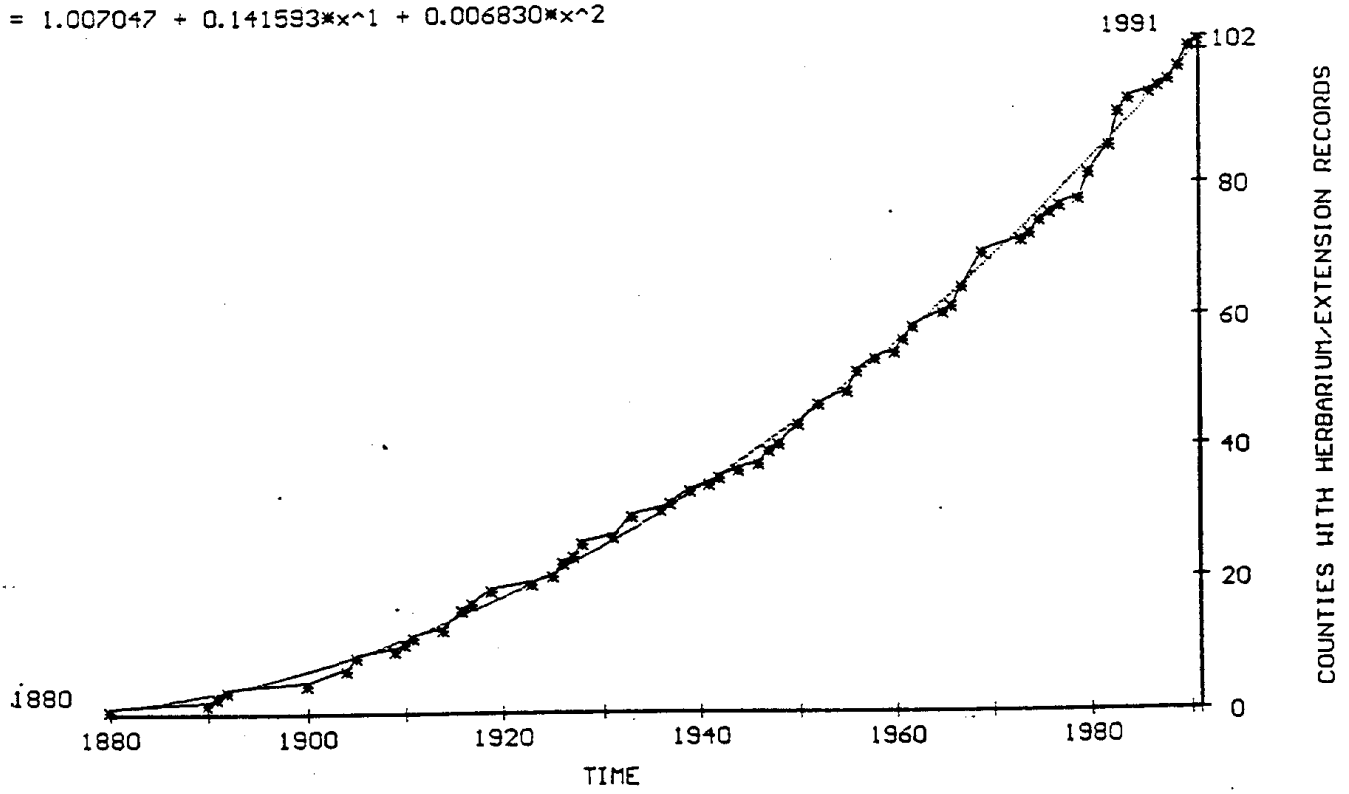
y = 1.586420 - 0.082188*x^1 + 0.005216*x^2 - 0.000031*x^3



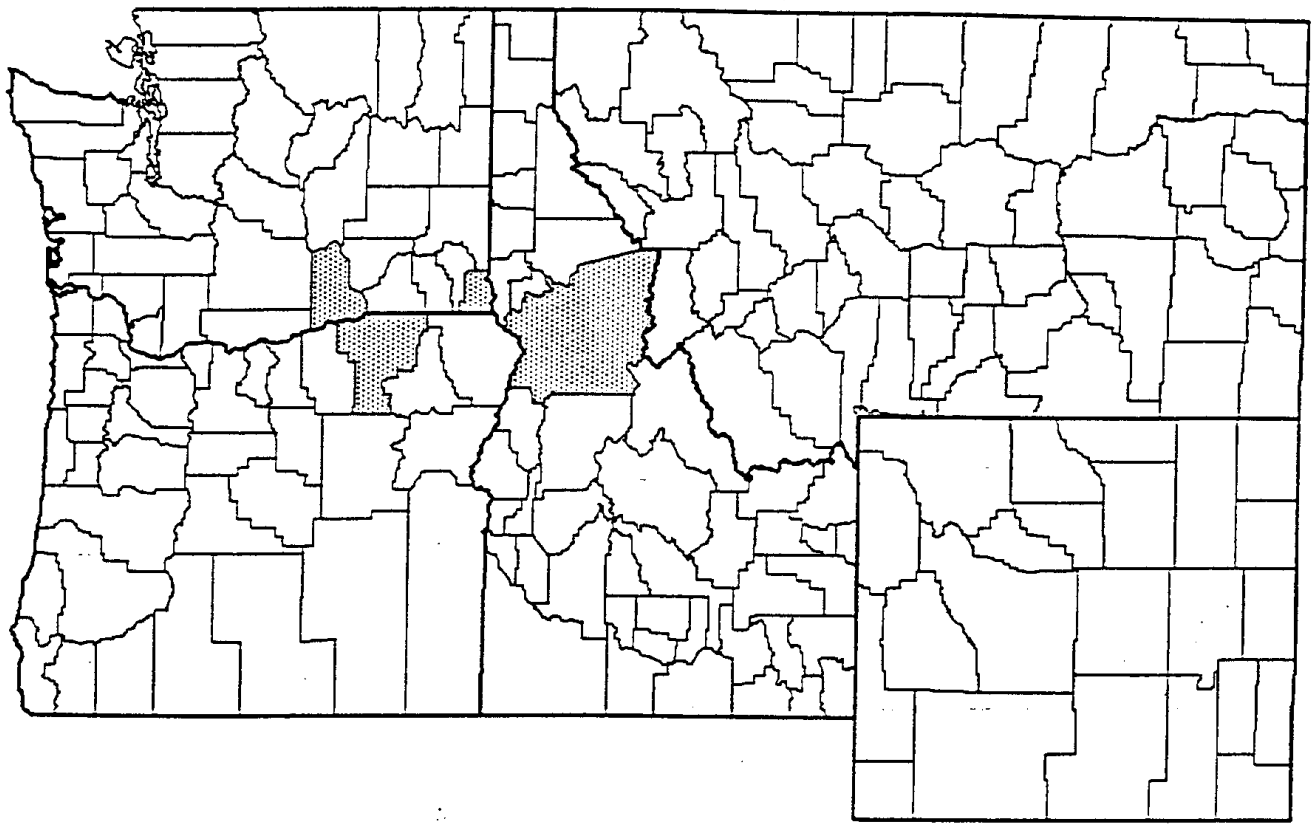
(REL 6.2) COUNTIES REPORTING SOLANUM DULCAMARA (BITTERSWEET NIGHTSHADE), 1875-1995.



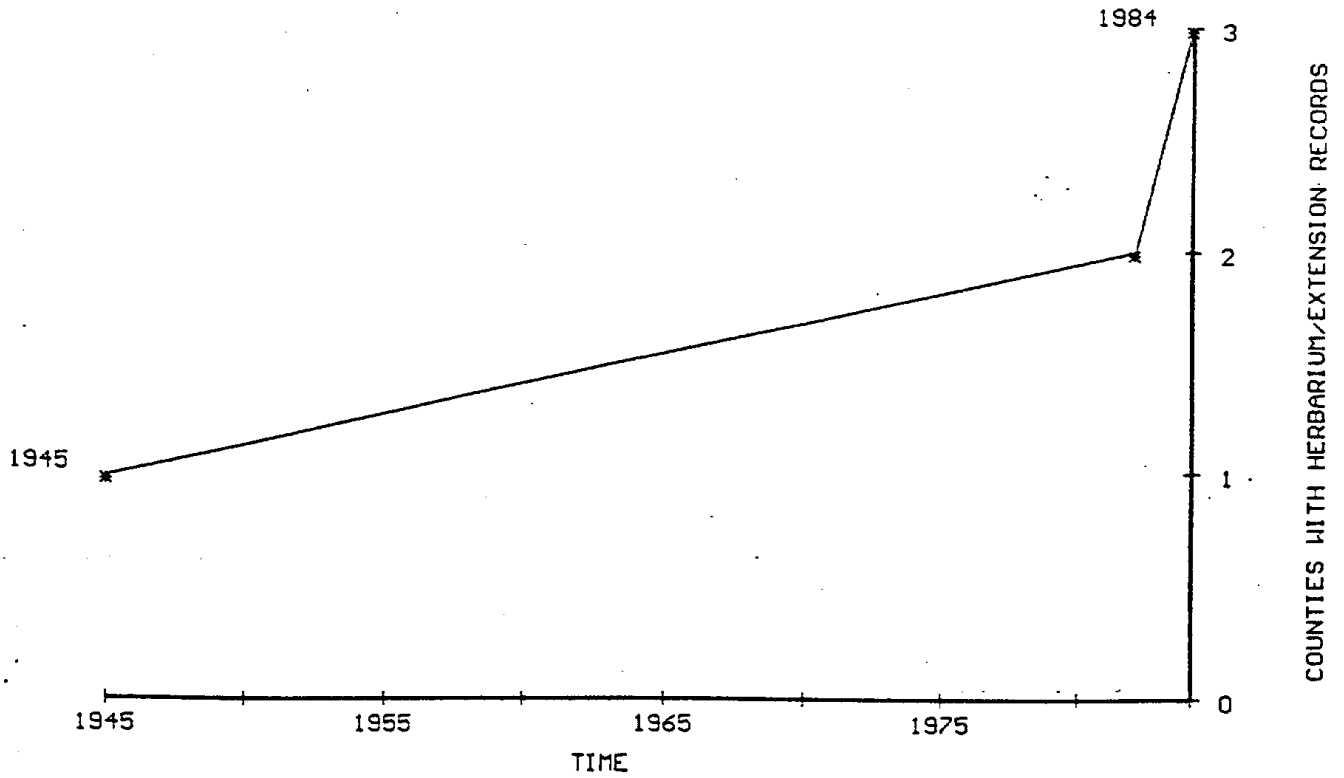
SOLANUM DULCAMARA INCREASE IN NORTHWEST STATES
y = 1.007047 + 0.141593*x^1 + 0.006830*x^2



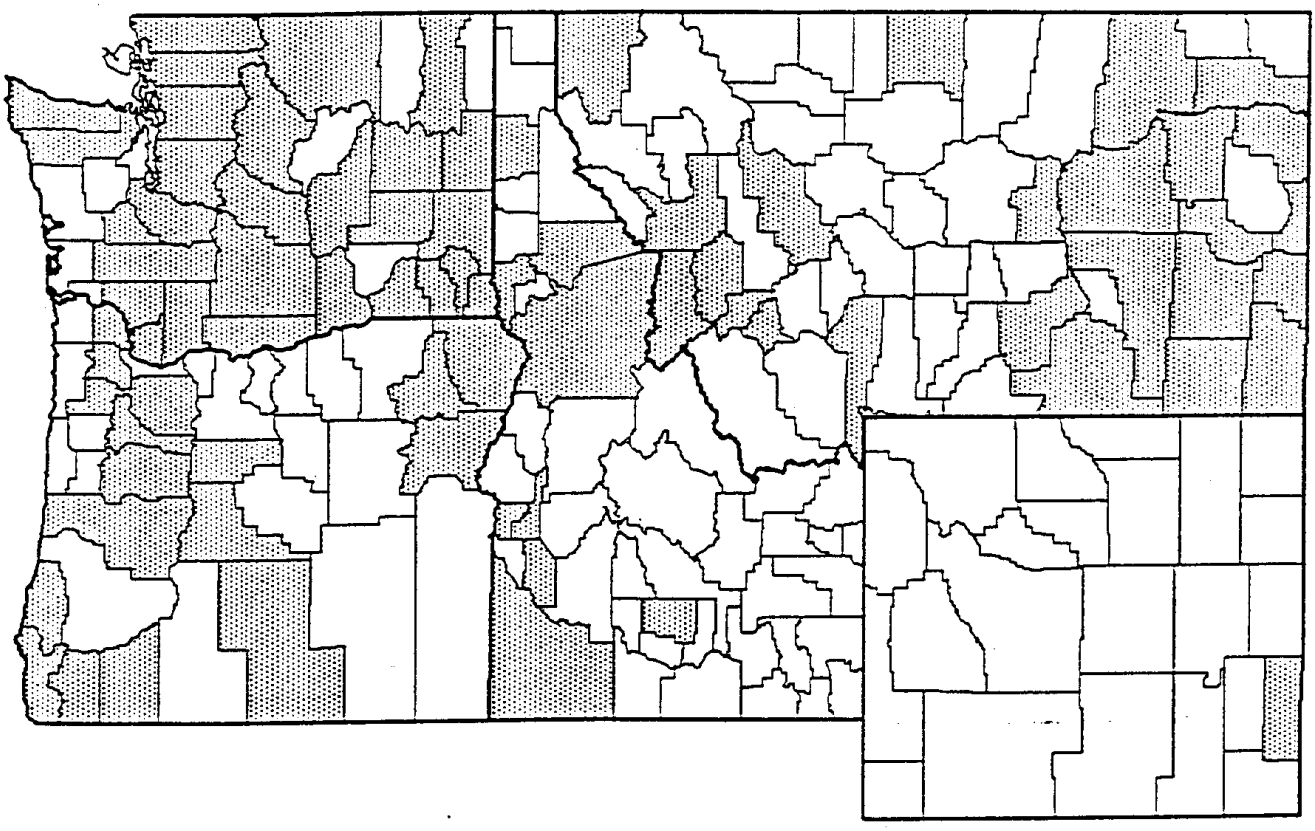
(REL 6.2) COUNTIES REPORTING SOLANUM ELAEAGNIFOLIUM (SILVERLEAF NIGHTSHADE), 1875-1995.



SOLANUM ELAEAGNIFOLIUM INCREASE IN NORTHWEST STATES

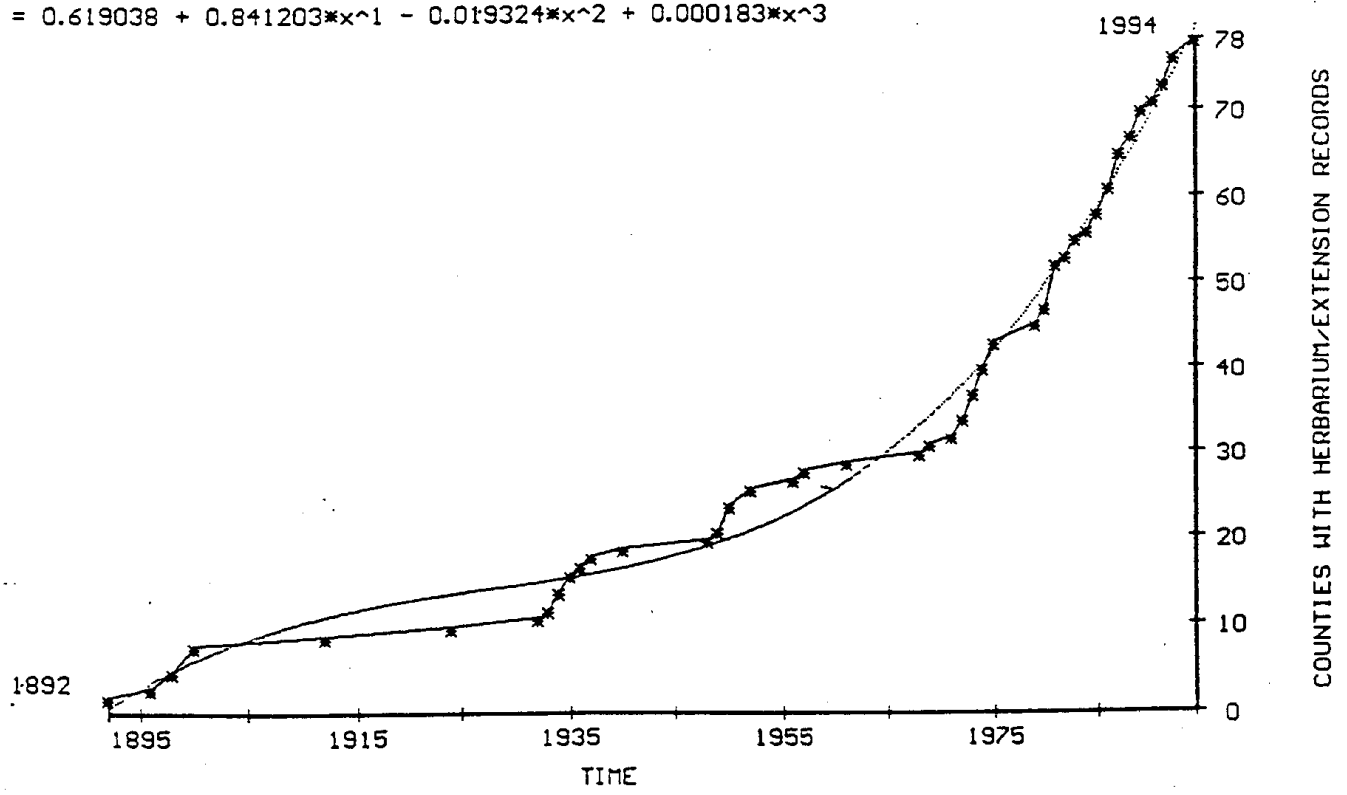


(REL 6.2) COUNTIES REPORTING SOLANUM ROSTRATUM (BUFFALOBUR), 1875-1995.

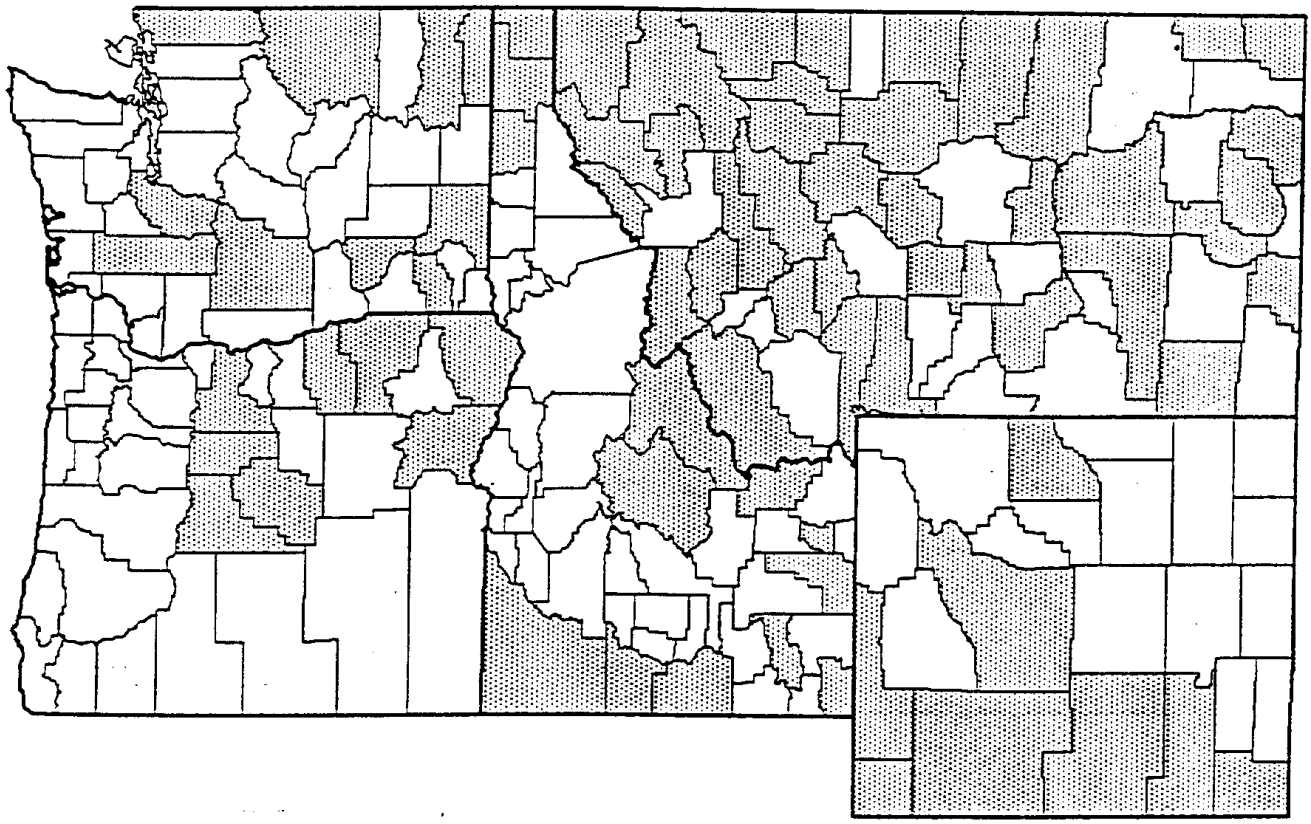


SOLANUM ROSTRATUM INCREASE IN NORTHWEST STATES

y = 0.619038 + 0.841203*x^1 - 0.019324*x^2 + 0.000183*x^3

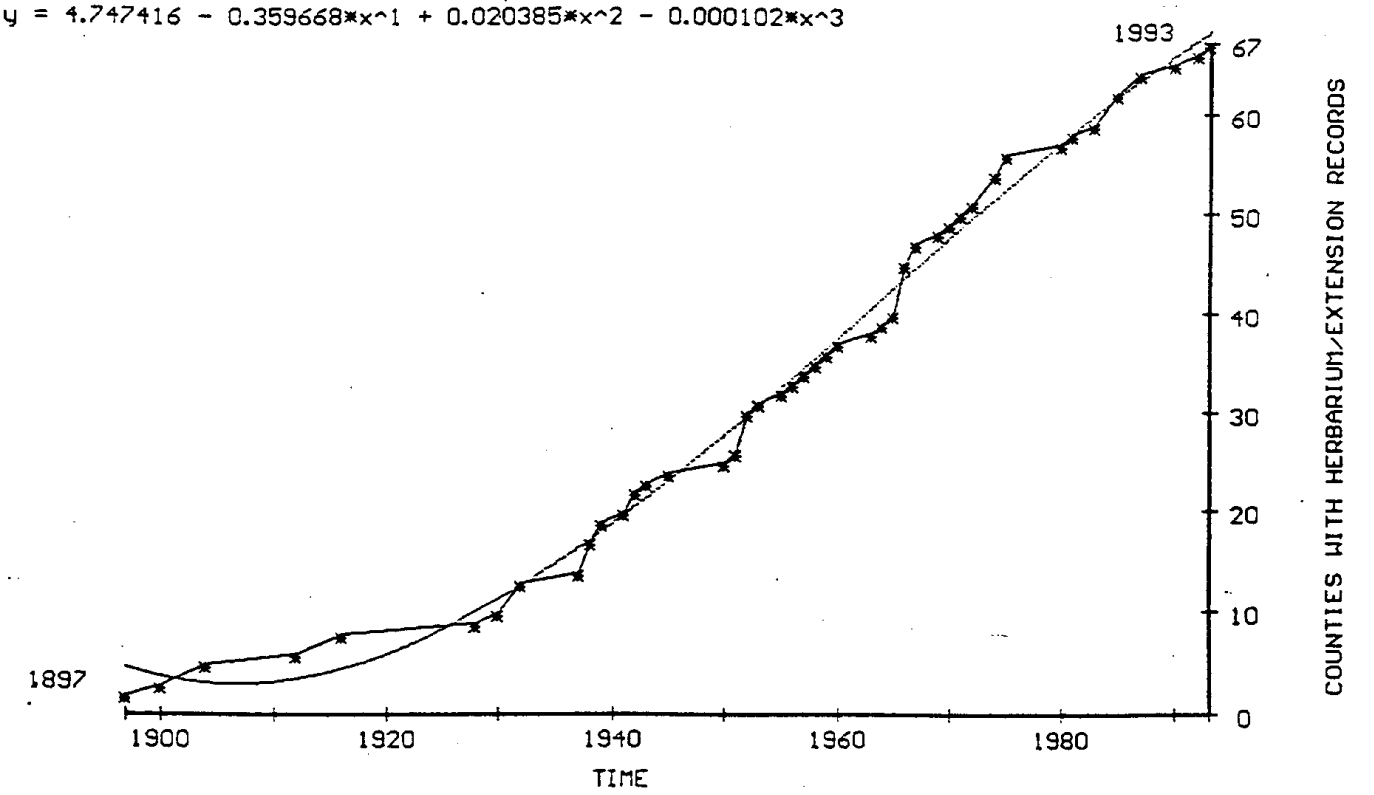


(REL 6.2) COUNTIES REPORTING SONCHUS ARVENSIS (FIELD MILK THISTLE), 1875-1995.

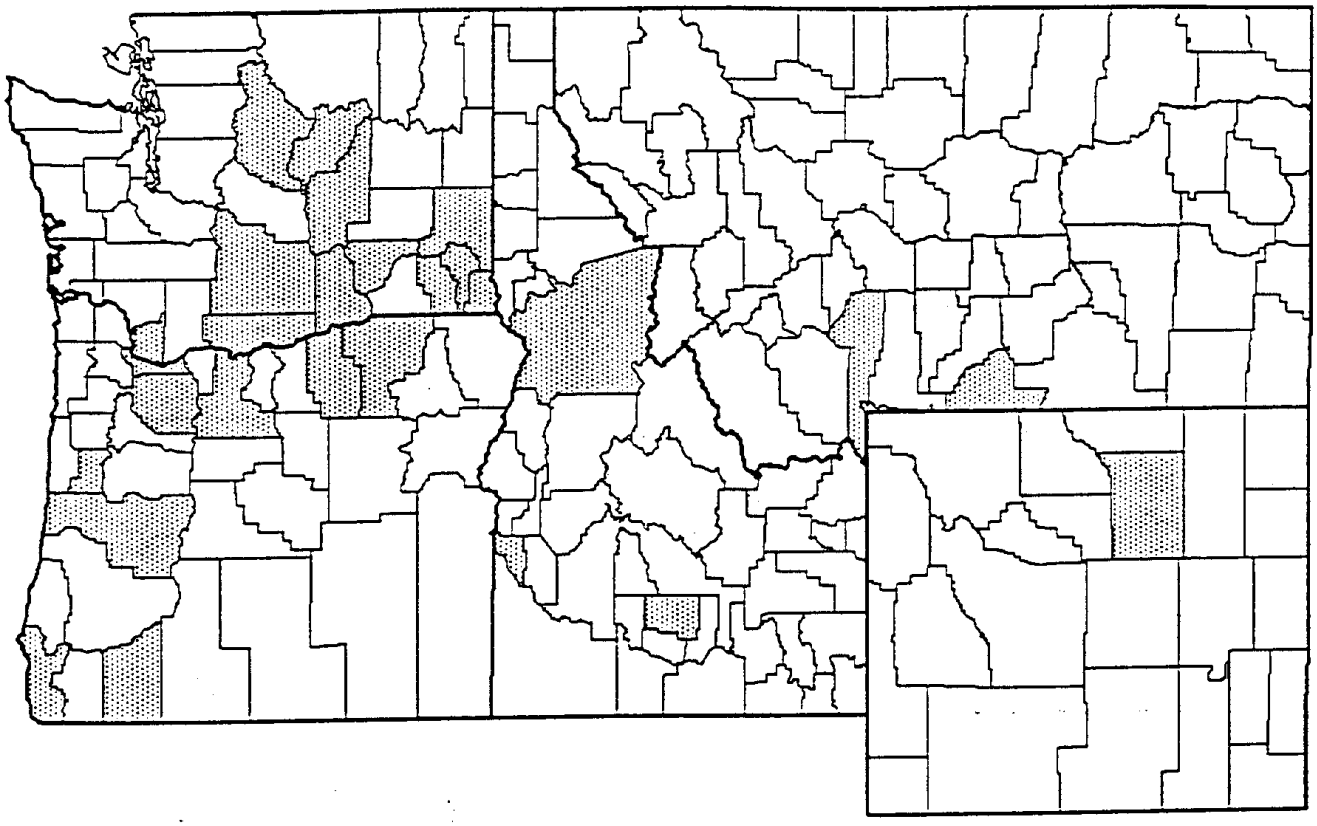


SONCHUS ARVENSIS INCREASE IN NORTHWEST STATES

y = 4.747416 - 0.359668*x^1 + 0.020385*x^2 - 0.000102*x^3

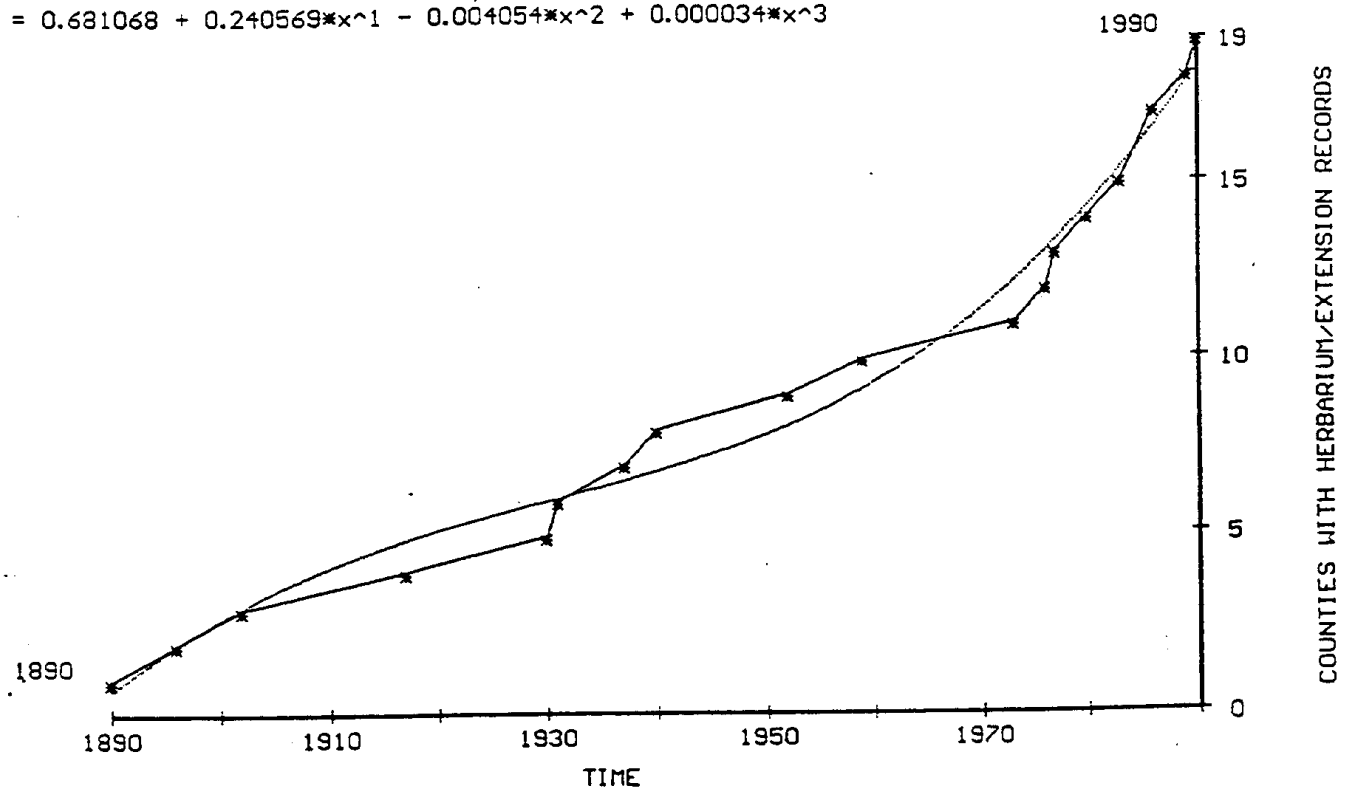


(REL 6.2) COUNTIES REPORTING SORGHUM HALEPENSE (JOHNSONGRASS), 1875-1995.

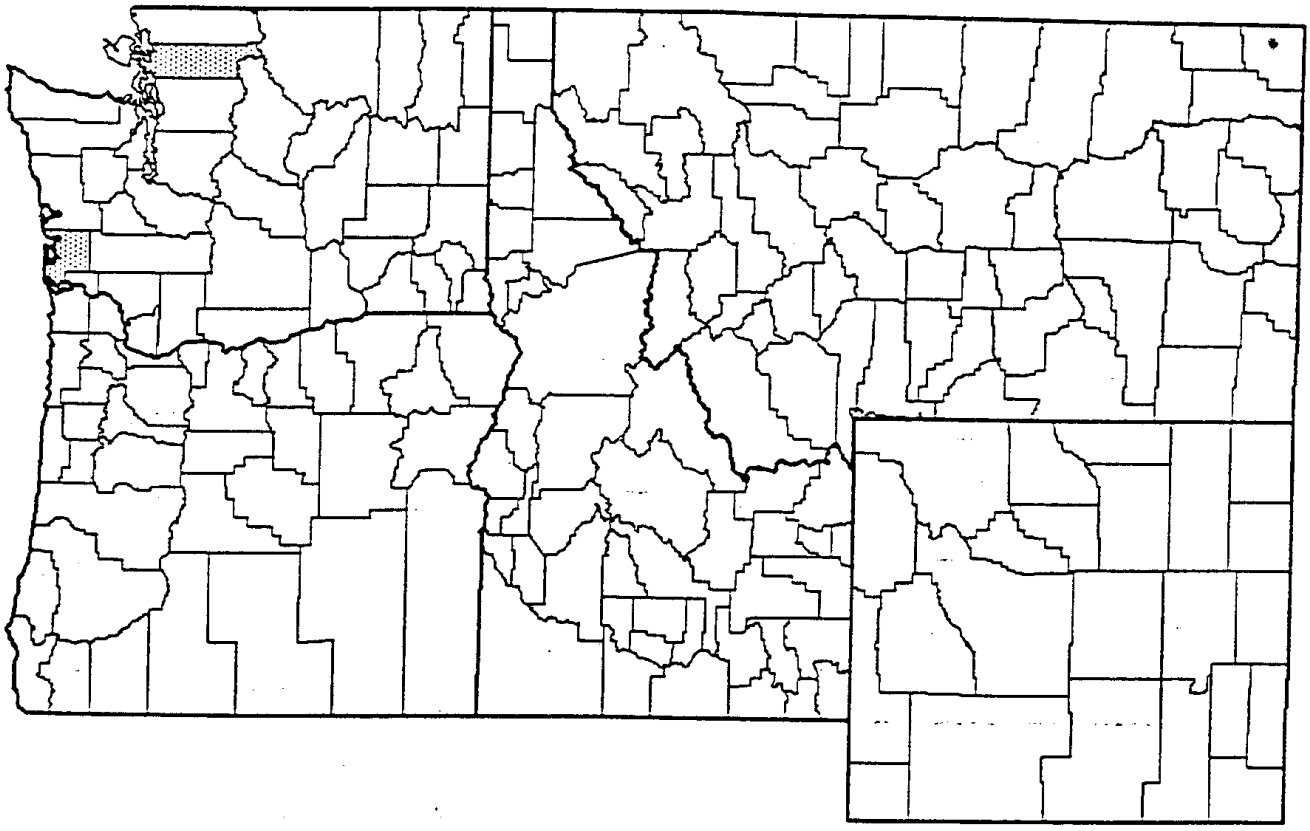


SORGHUM HALEPENSE INCREASE IN NORTHWEST STATES

y = 0.681068 + 0.240569*x^1 - 0.004054*x^2 + 0.000034*x^3

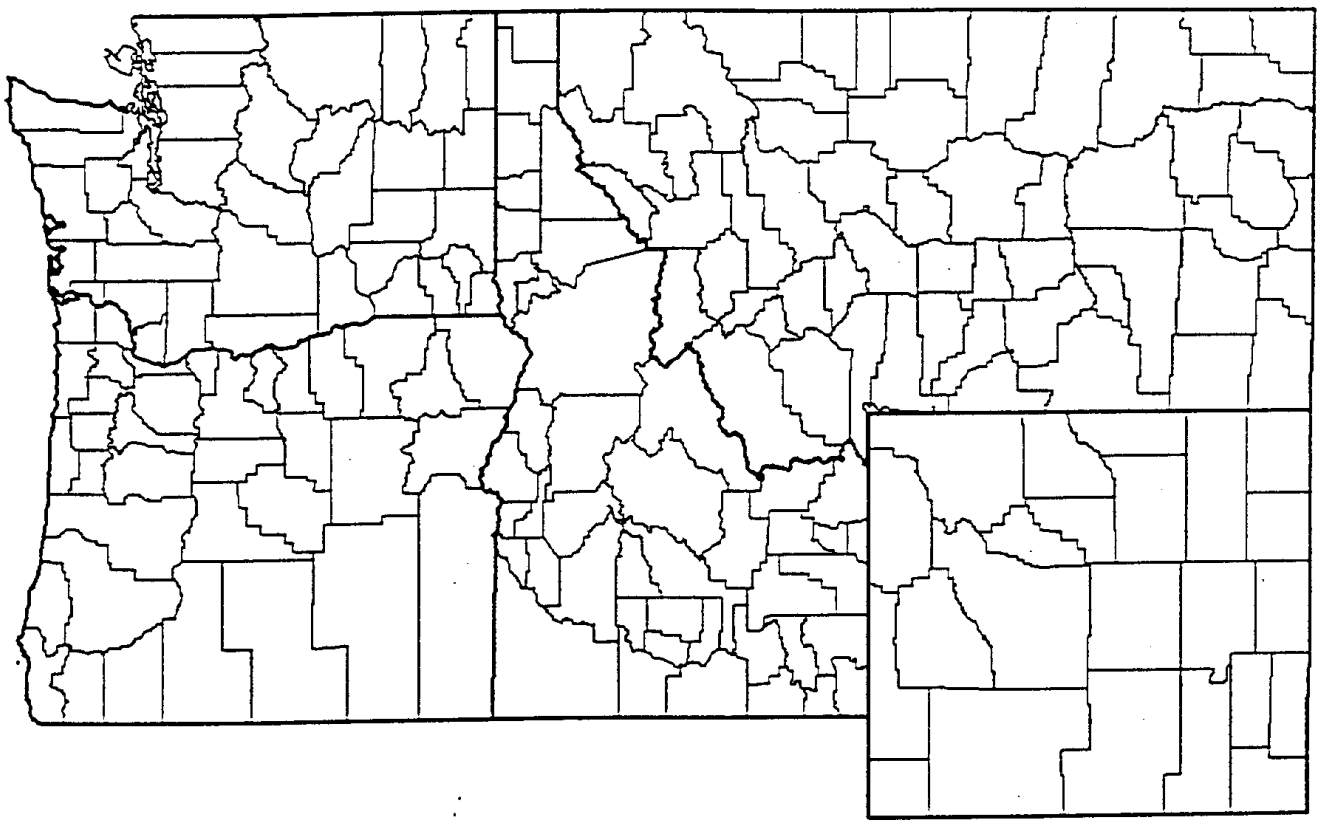


(REL 6.2) COUNTIES REPORTING SPARTINA ALTERNIFLORA (SMOOTH CORD GRASS), 1875-1995.

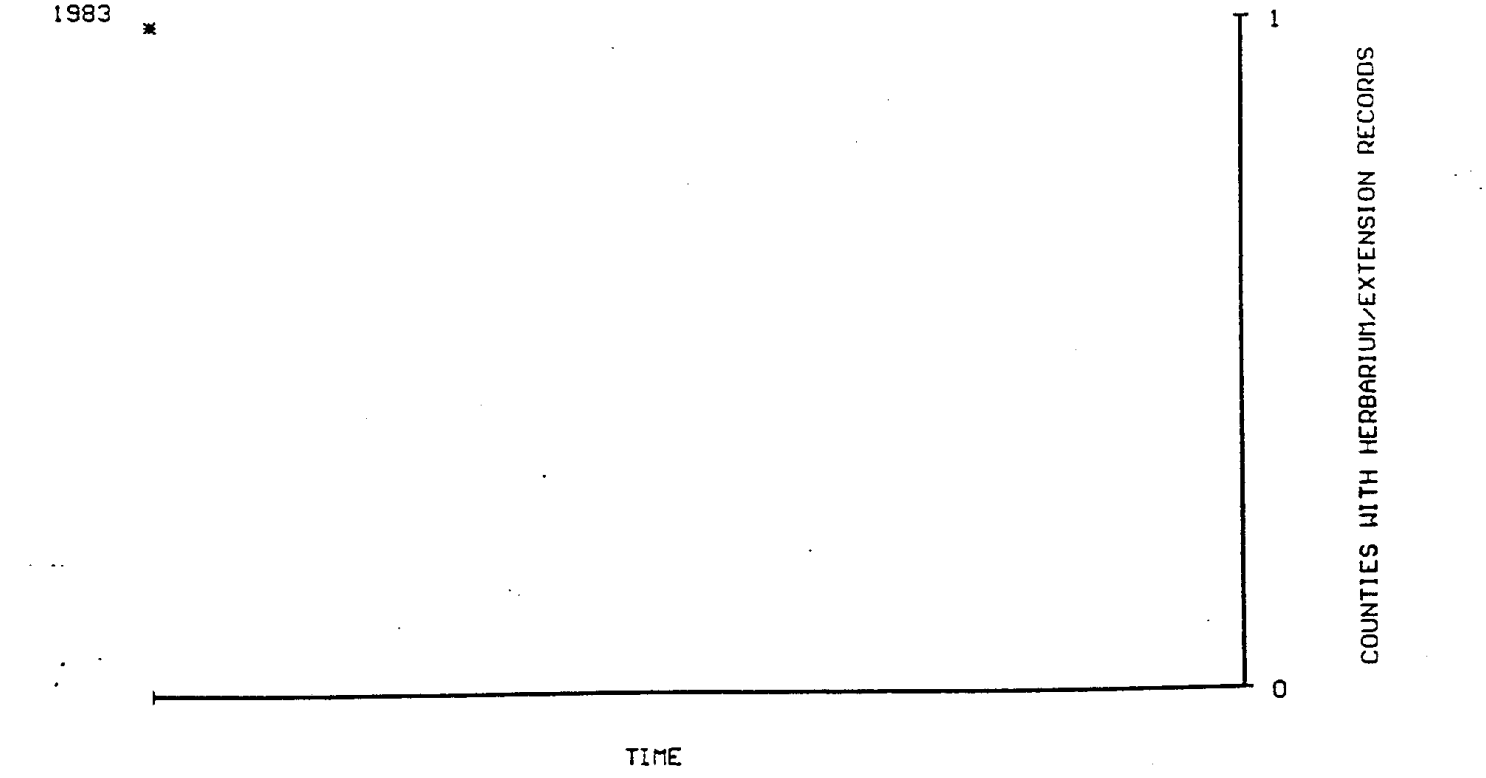


SPARTINA ALTERNIFLORA INCREASE IN NORTHWEST STATES

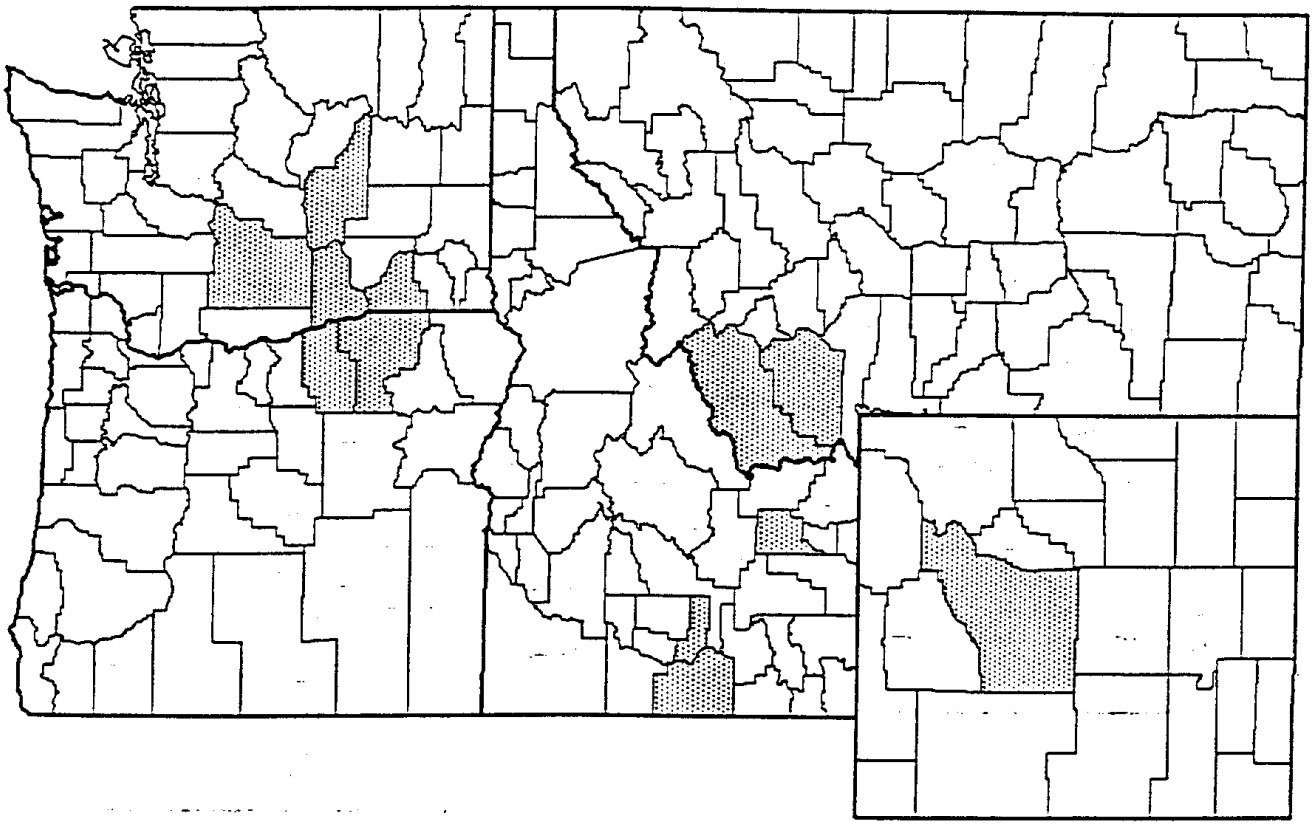
(REL 6.2) COUNTIES REPORTING SPARTINA ANGLICA (CORDGRASS), 1875-1995.



SPARTINA ANGLICA INCREASE IN NORTHWEST STATES

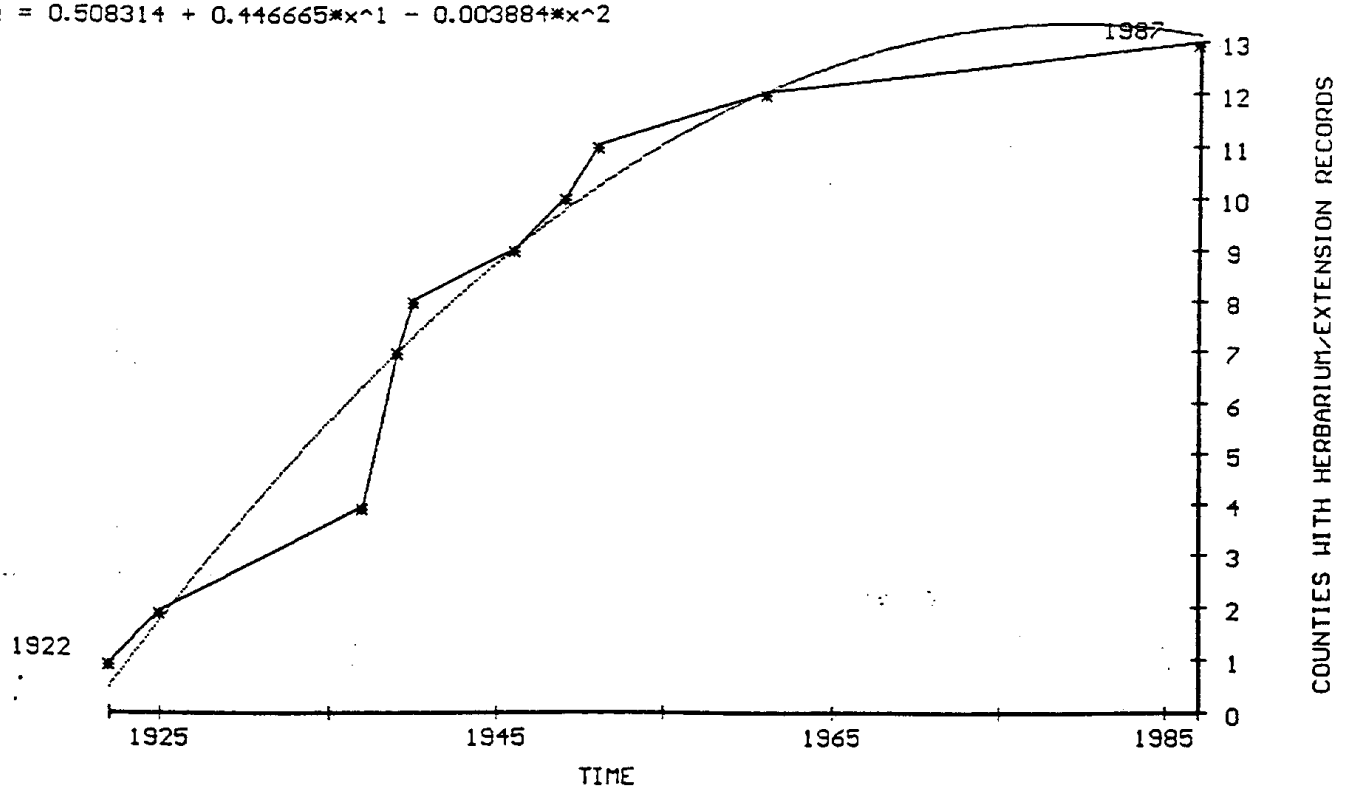


(REL 6.2) COUNTIES REPORTING SPHAEROPHYSA SALSULA (SWAINSONPEA), 1875-1995.

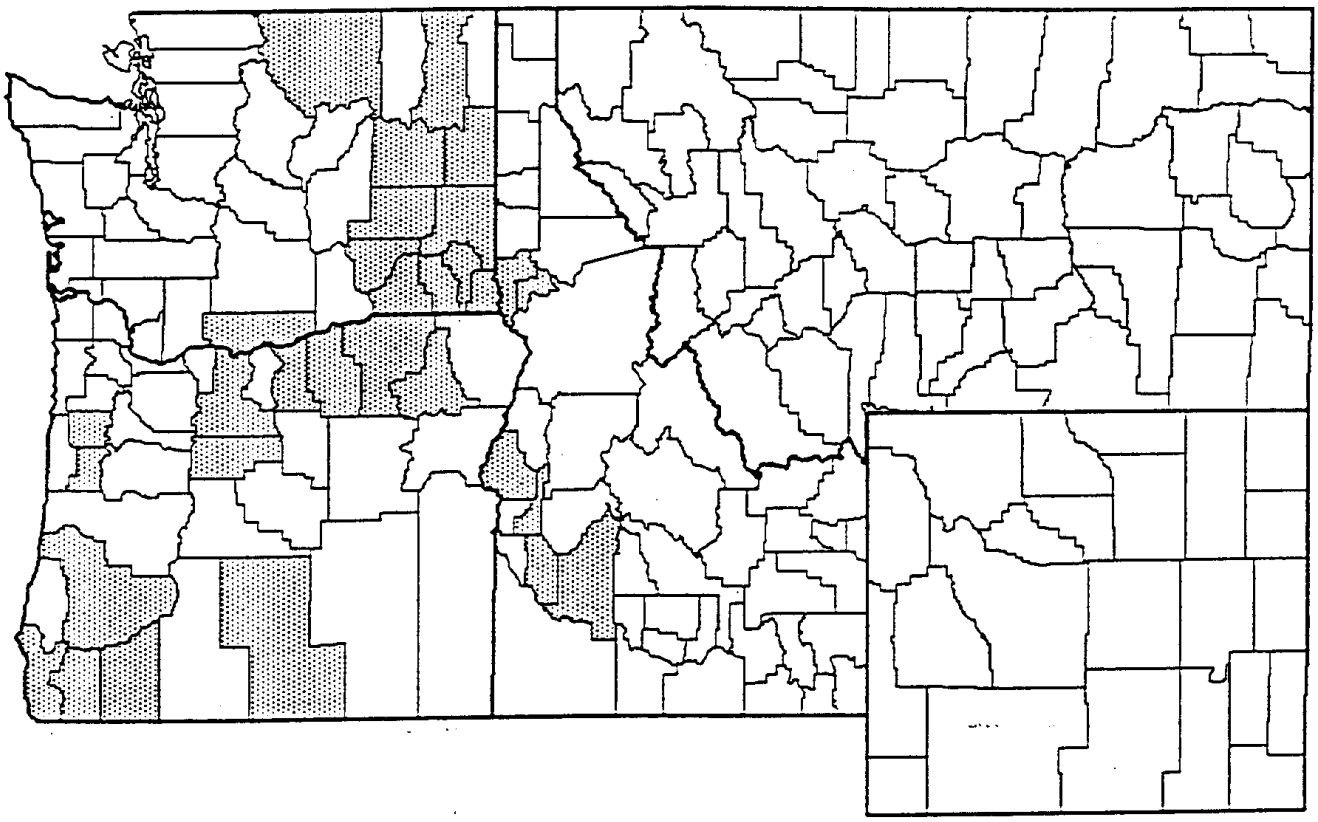


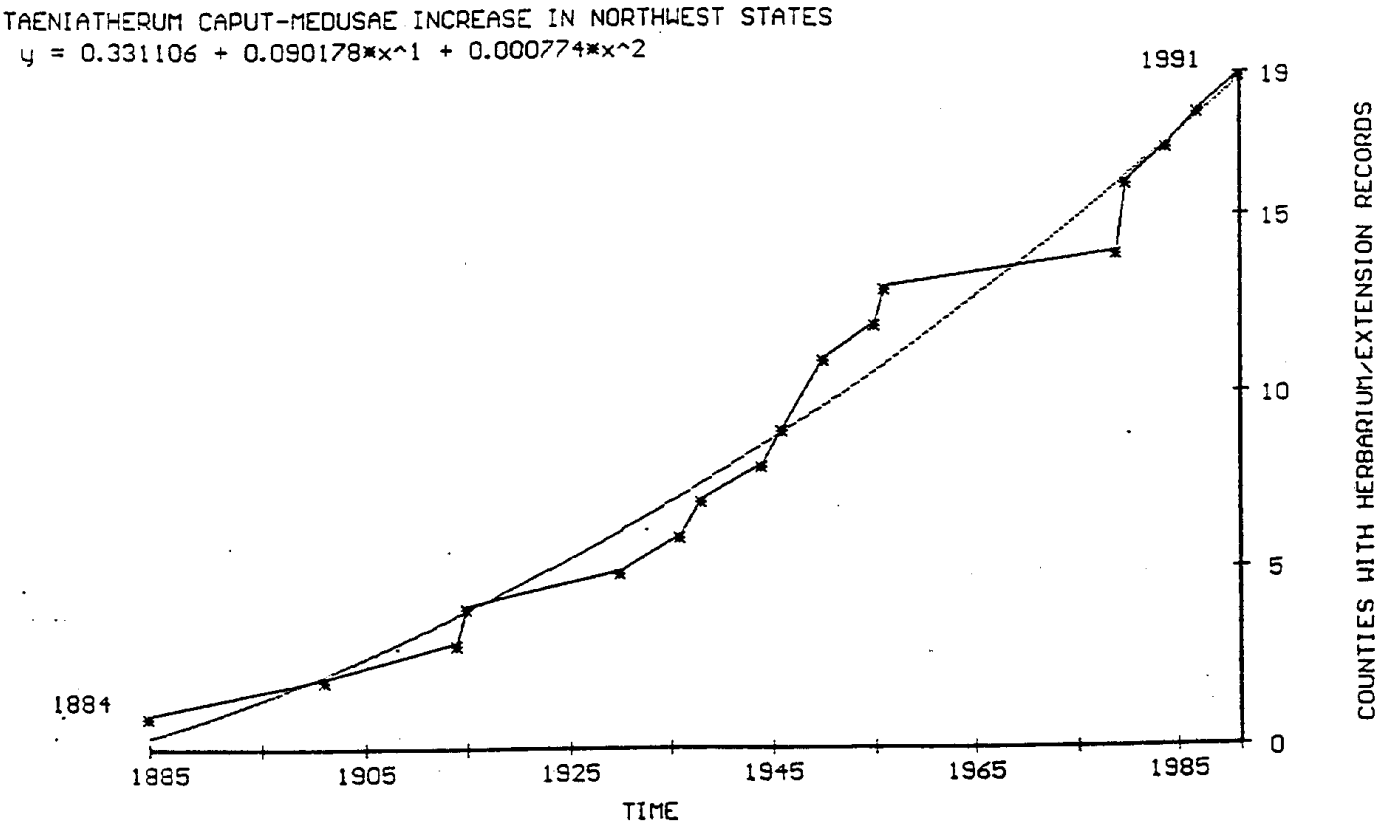
SPHAEROPHYSA SALSULA INCREASE IN NORTHWEST STATES

y = 0.508314 + 0.446665*x^1 - 0.003884*x^2

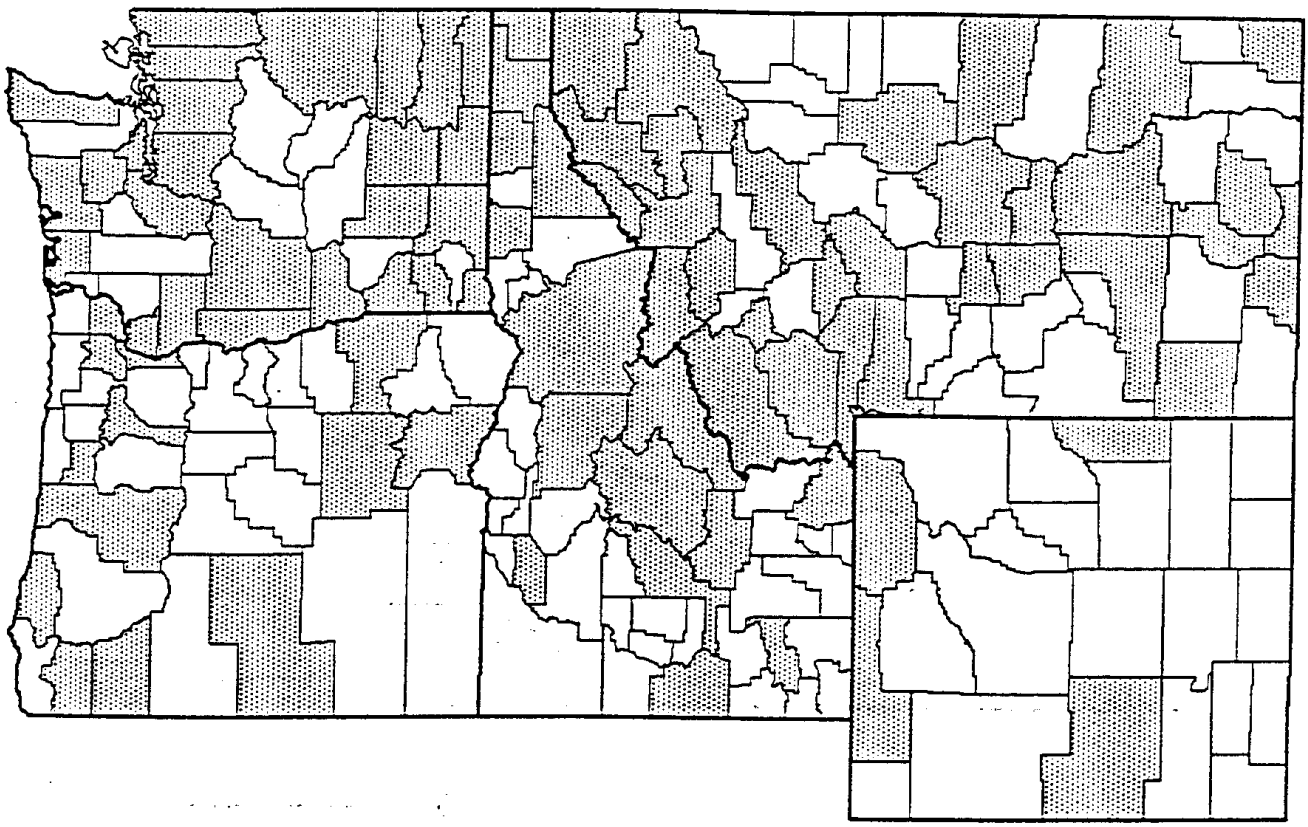


(REL 6.2) COUNTIES REPORTING TAENIATHERUM CAPUT-MEDUSAE (MEDUSAHEAD), 1875-1995.

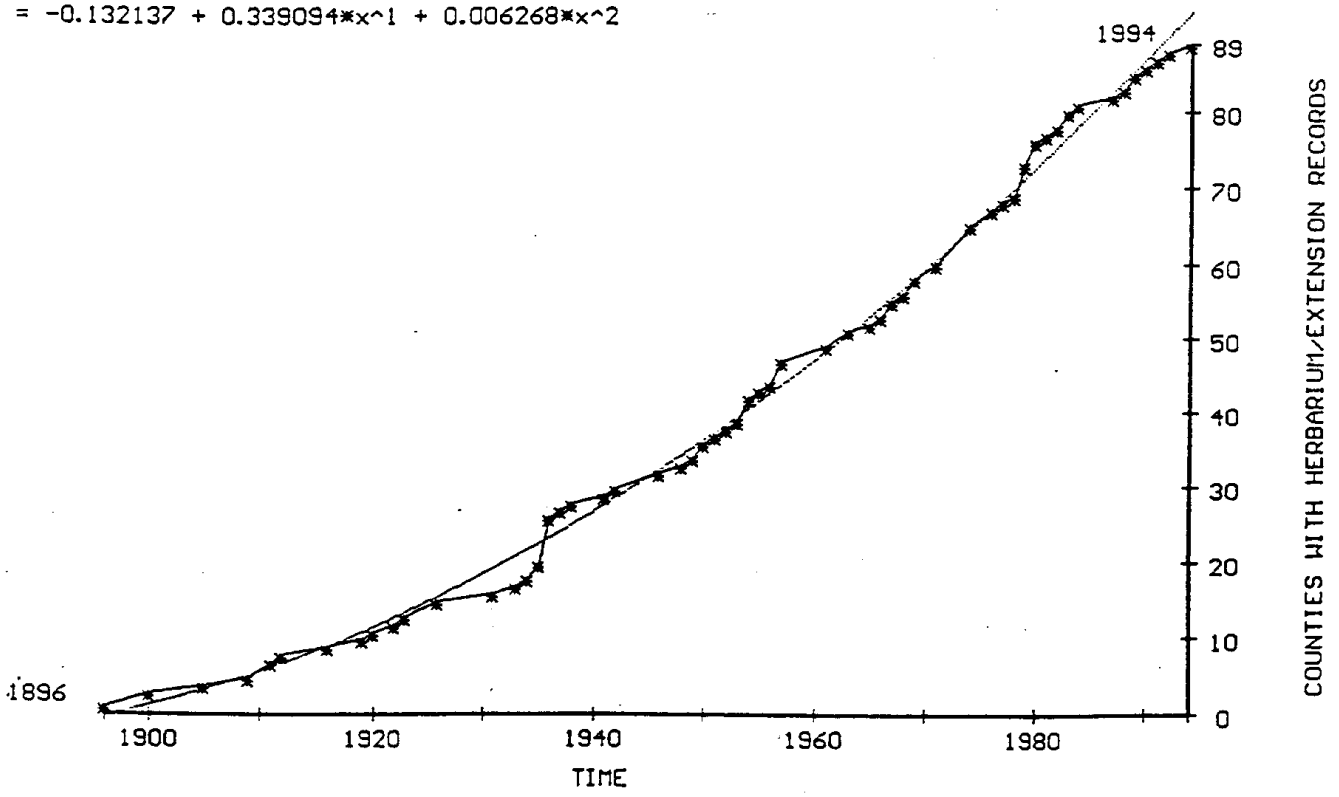




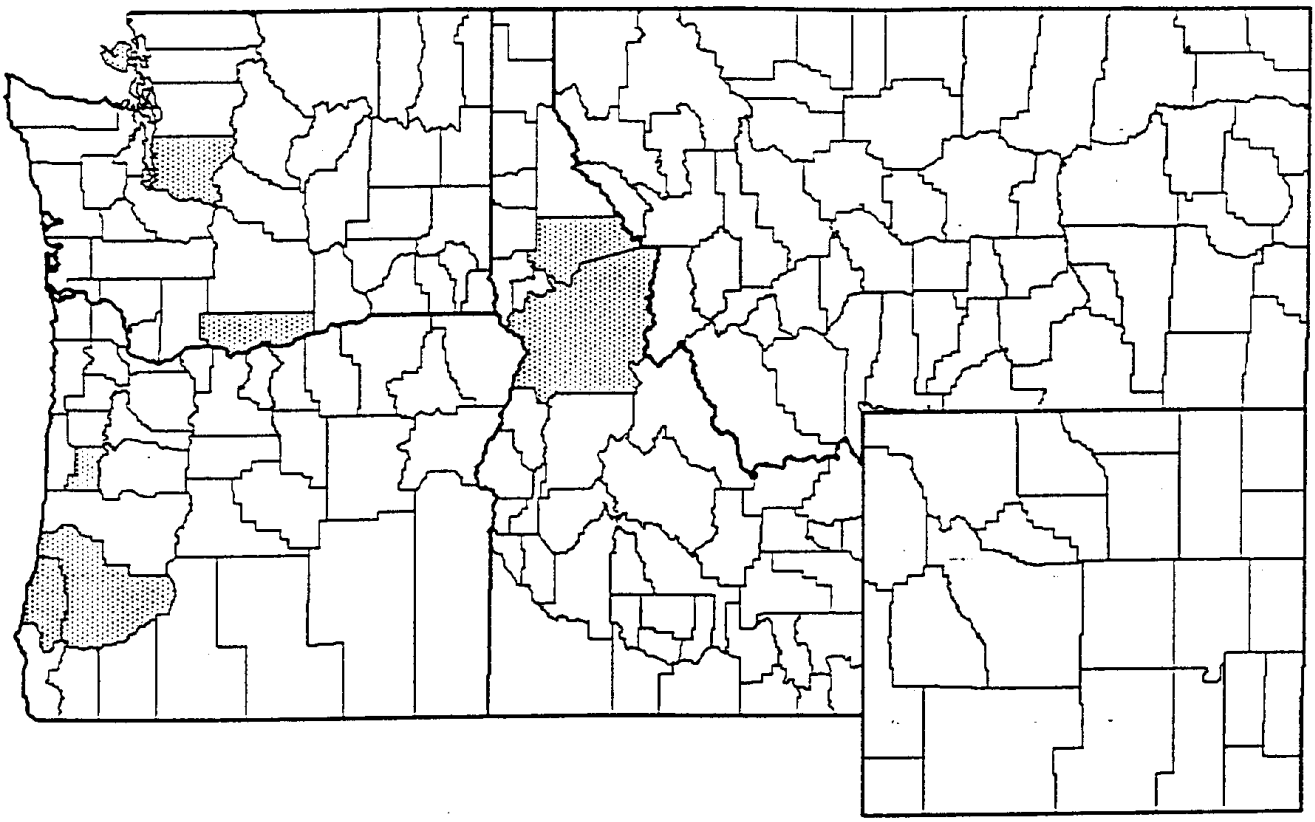
(REL 6.2) COUNTIES REPORTING TANACETUM VULGARE (COMMON TANSY), 1875-1995.



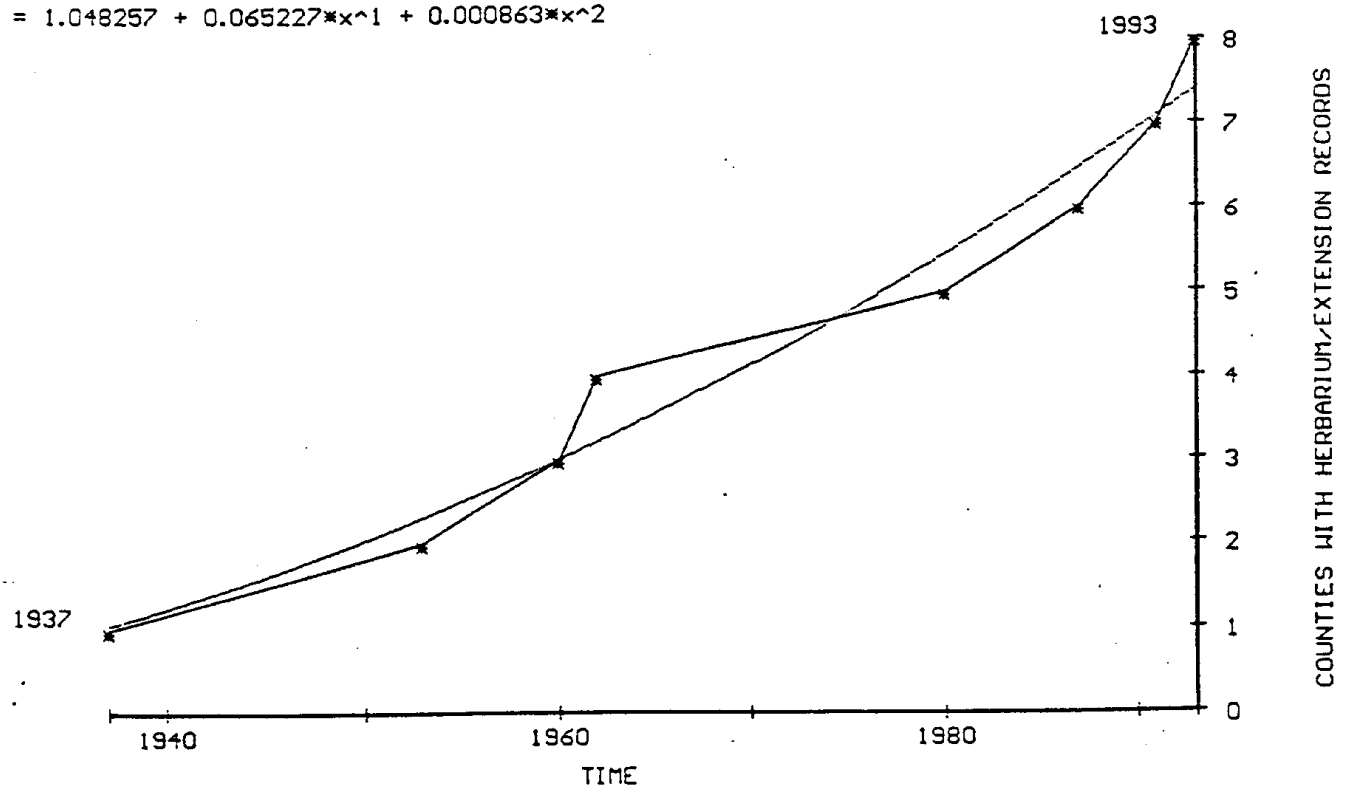
TANACETUM VULGARE INCREASE IN NORTHWEST STATES
y = -0.132137 + 0.339094*x^1 + 0.006268*x^2



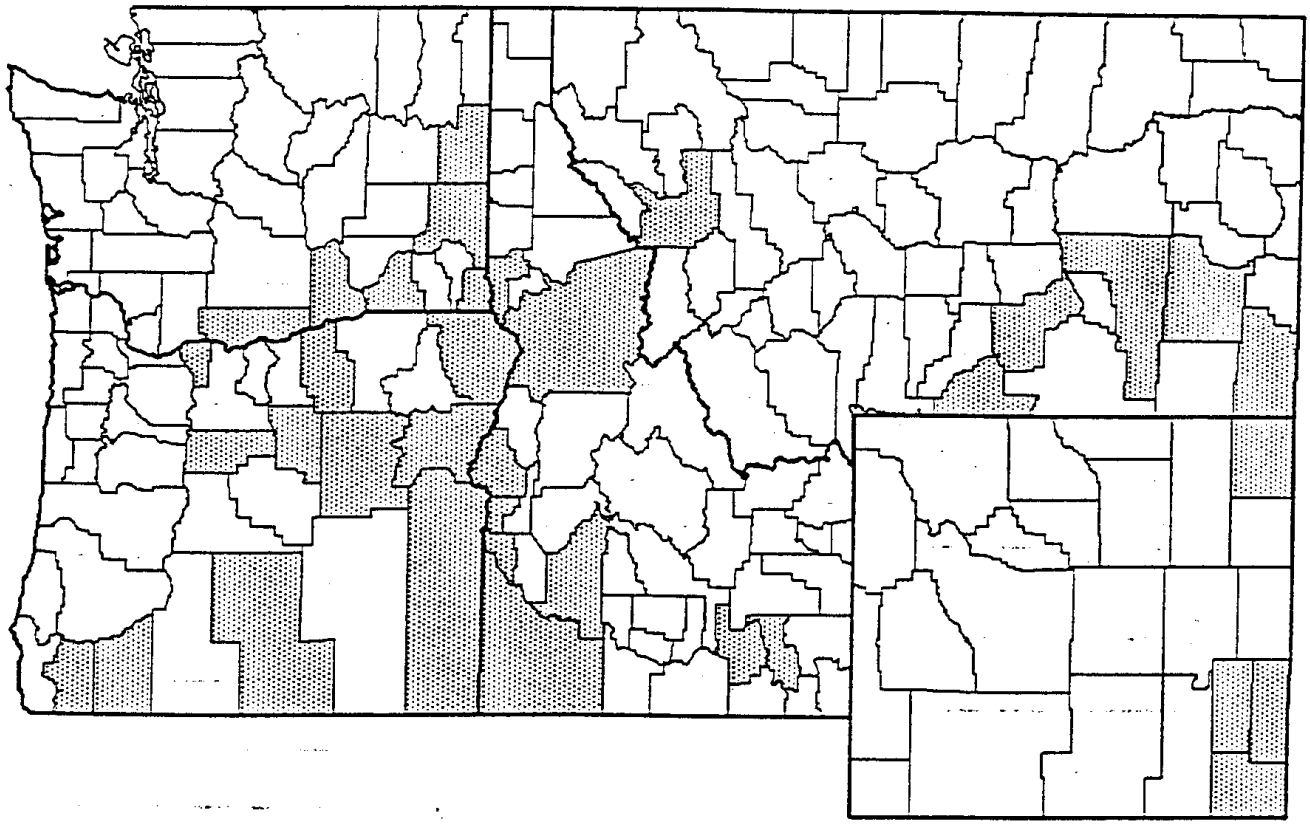
(REL 6.2) COUNTIES REPORTING TORILIS ARVENSIS (FIELD HEDGE-PARSLEY), 1875-1995.



TORILIS ARVENSIS INCREASE IN NORTHWEST STATES
y = 1.048257 + 0.065227*x^1 + 0.000863*x^2

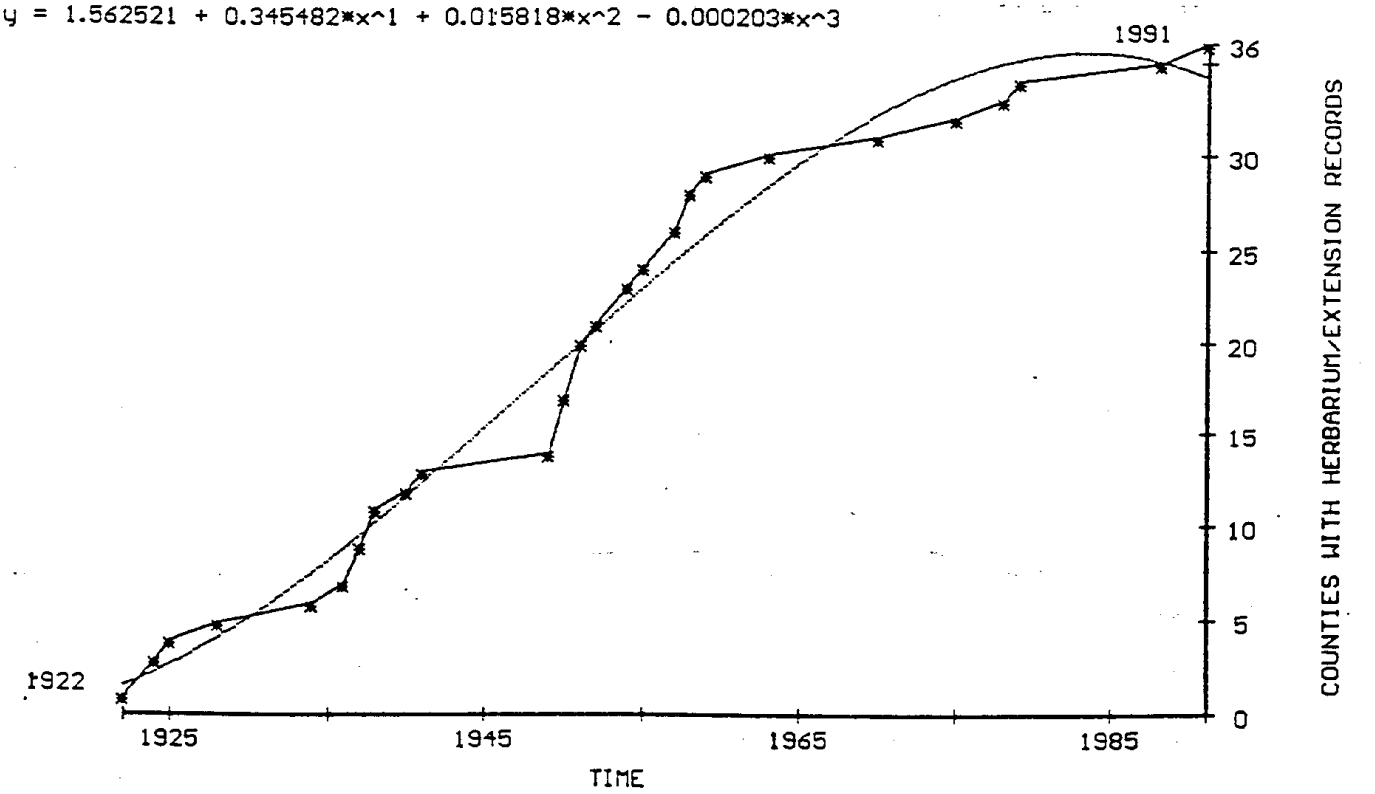


(REL 6.2) COUNTIES REPORTING TRIBULUS TERRESTRIS (PUNCTUREVINE), 1875-1995.

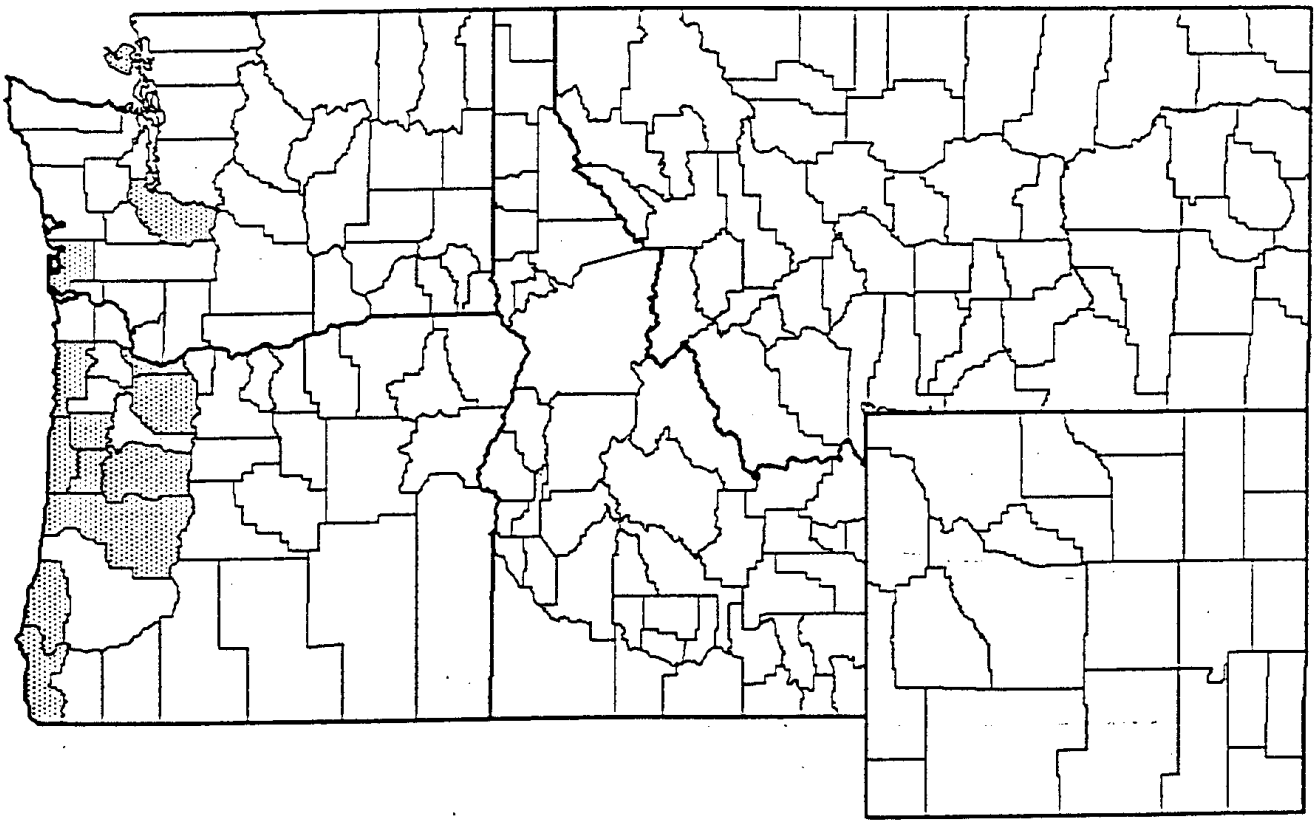


TRIBULUS TERRESTRIS INCREASE IN NORTHWEST STATES

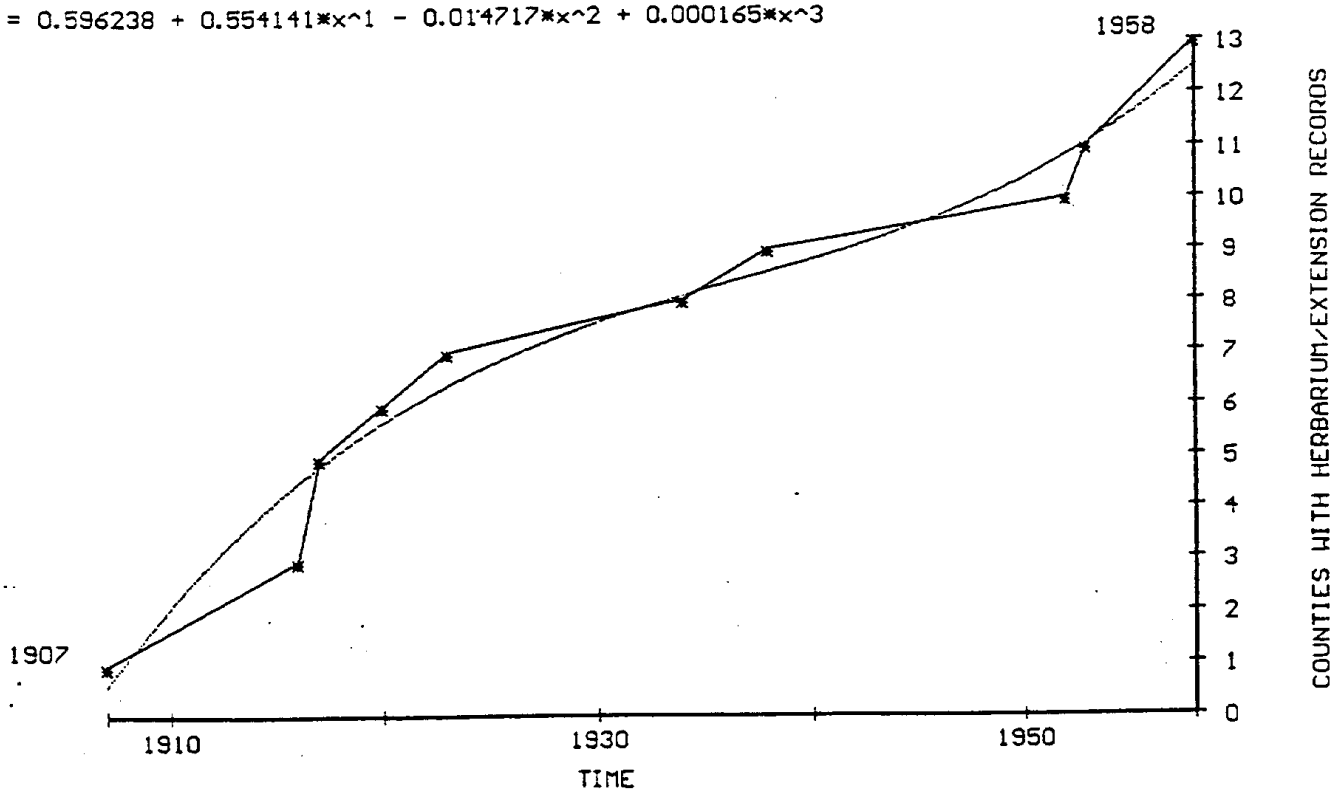
y = 1.562521 + 0.345482*x^1 + 0.015818*x^2 - 0.000203*x^3



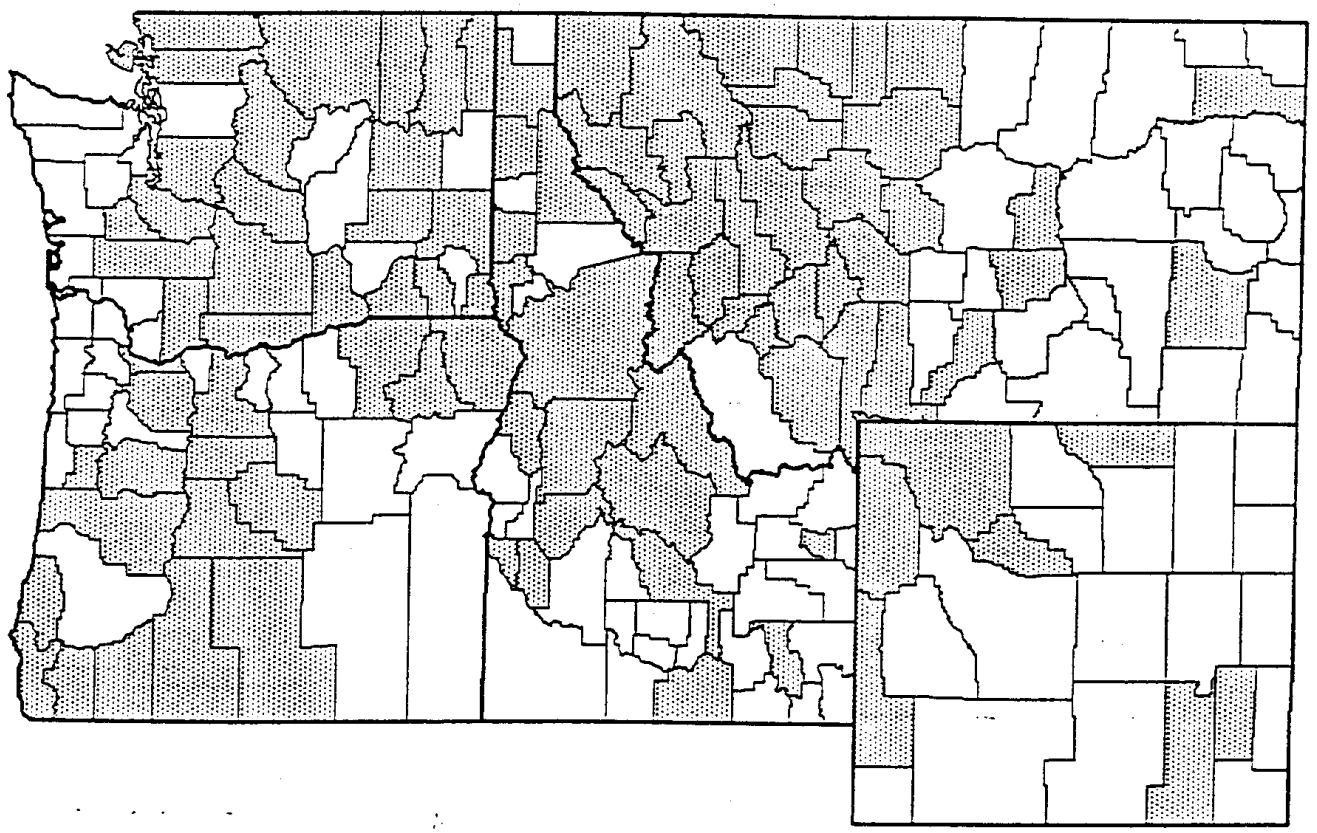
(REL 6.2) COUNTIES REPORTING ULEX EUROPAEUS (GORSE), 1875-1995.



ULEX EUROPAEUS INCREASE IN NORTHWEST STATES
y = 0.596238 + 0.554141*x^1 - 0.014717*x^2 + 0.000165*x^3

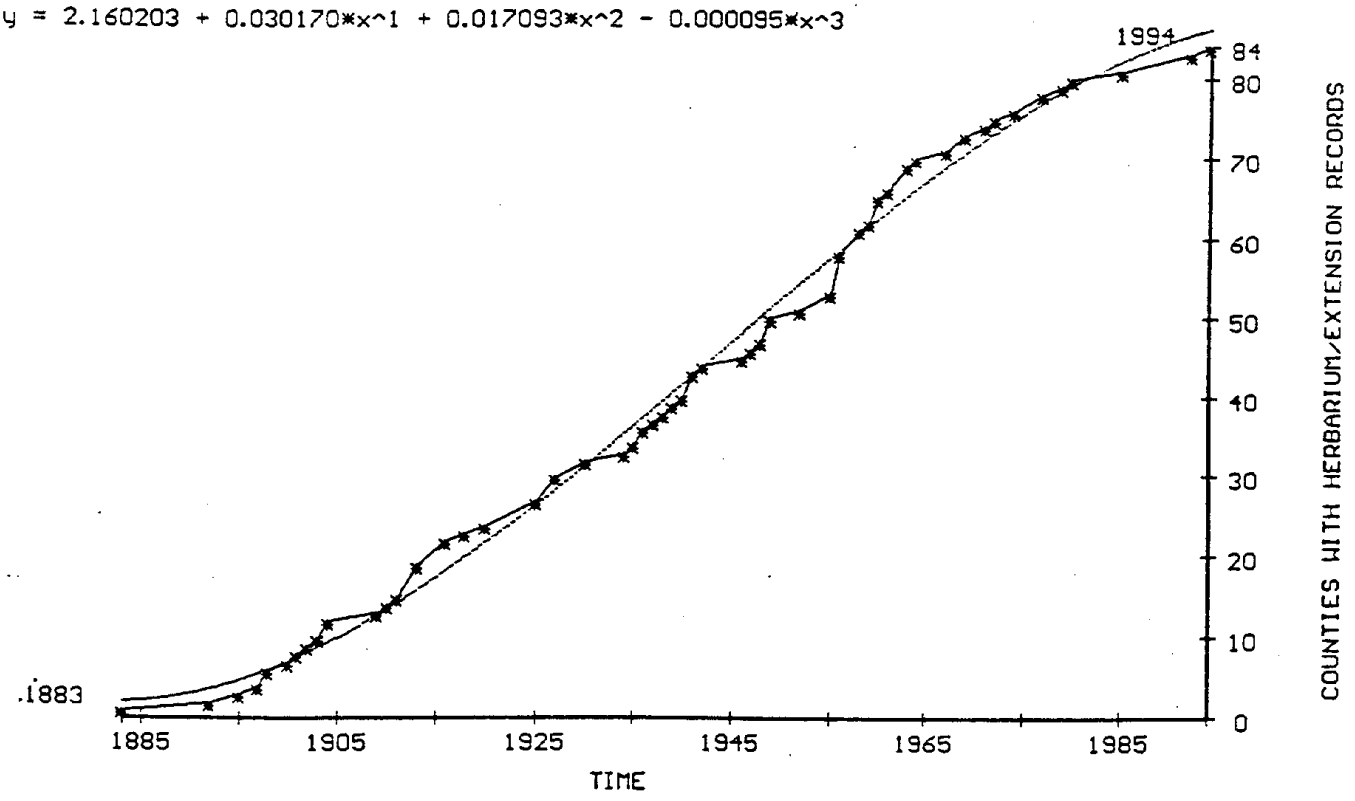


(REL 6.2) COUNTIES REPORTING VERBASCUM THAPSUS (COMMON MULLEIN), 1875-1995.

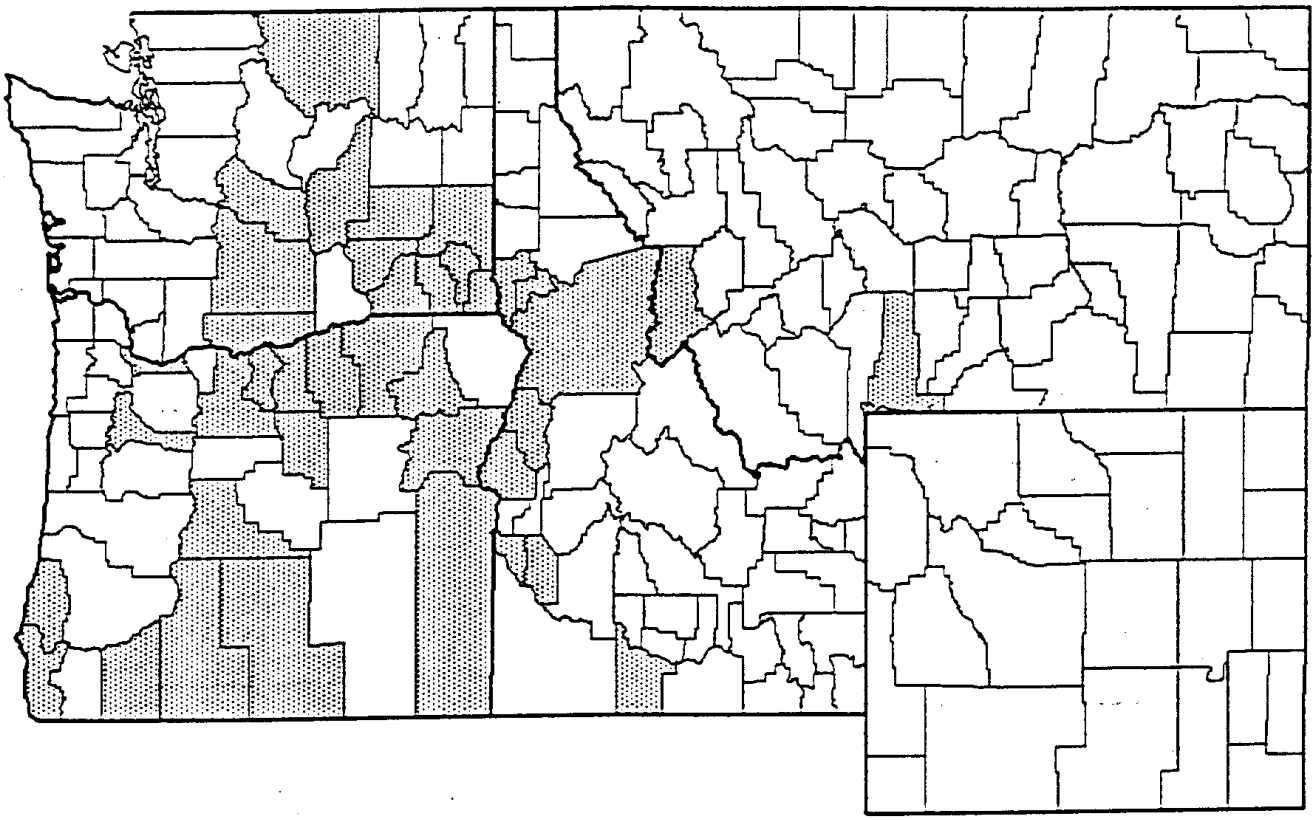


VERBASCUM THAPSUS INCREASE IN NORTHWEST STATES

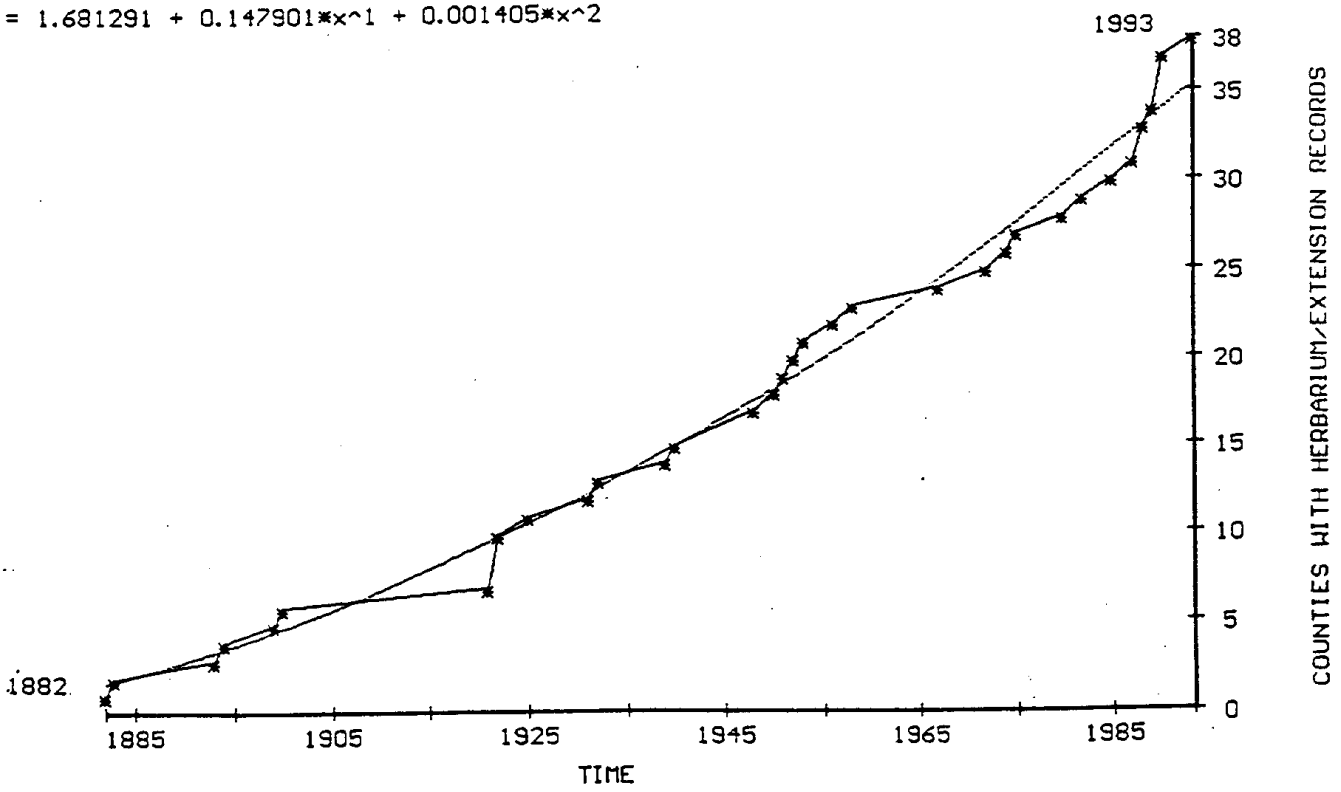
y = 2.160203 + 0.030170*x^1 + 0.017093*x^2 - 0.000095*x^3



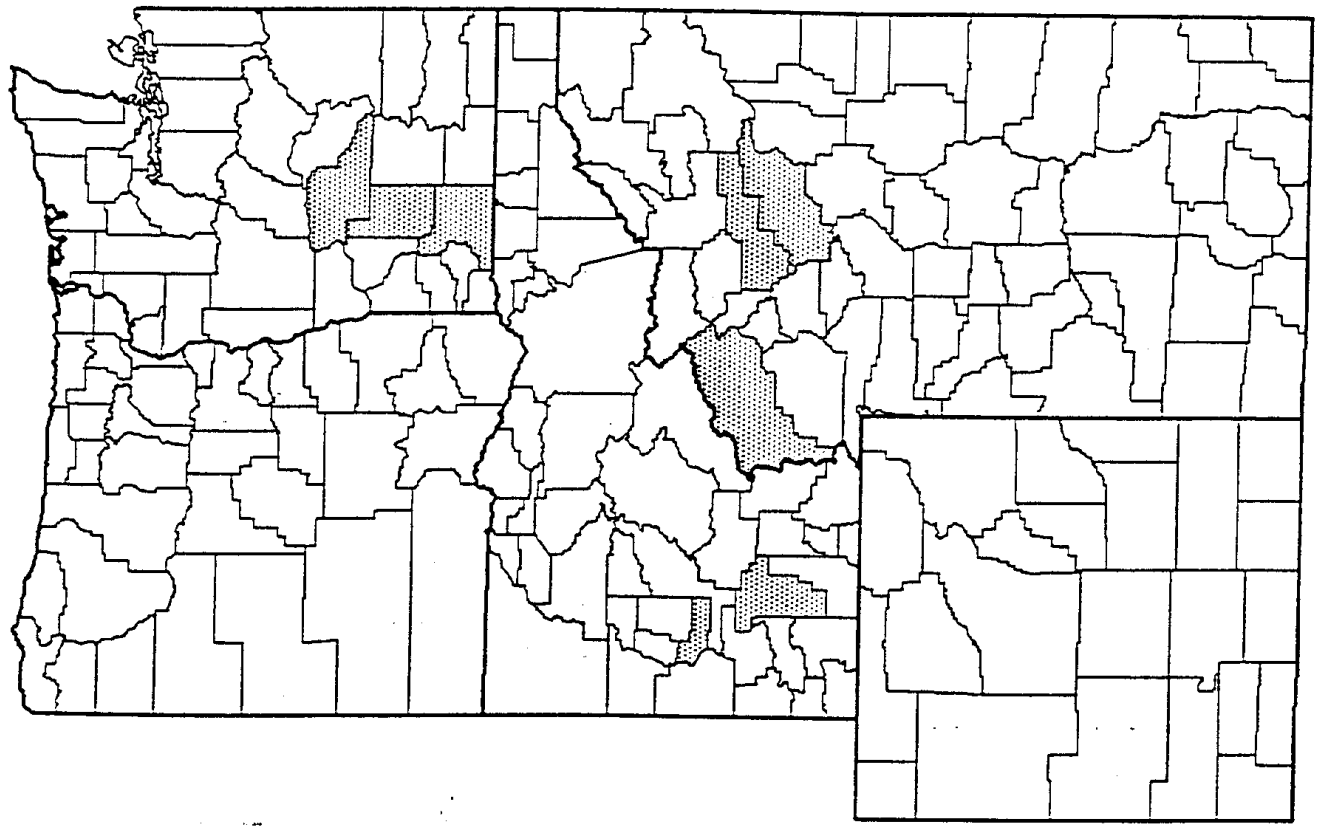
(REL 6.2) COUNTIES REPORTING XANTHIUM SPINOSUM (SPINY COCKLEBUR), 1875-1995.



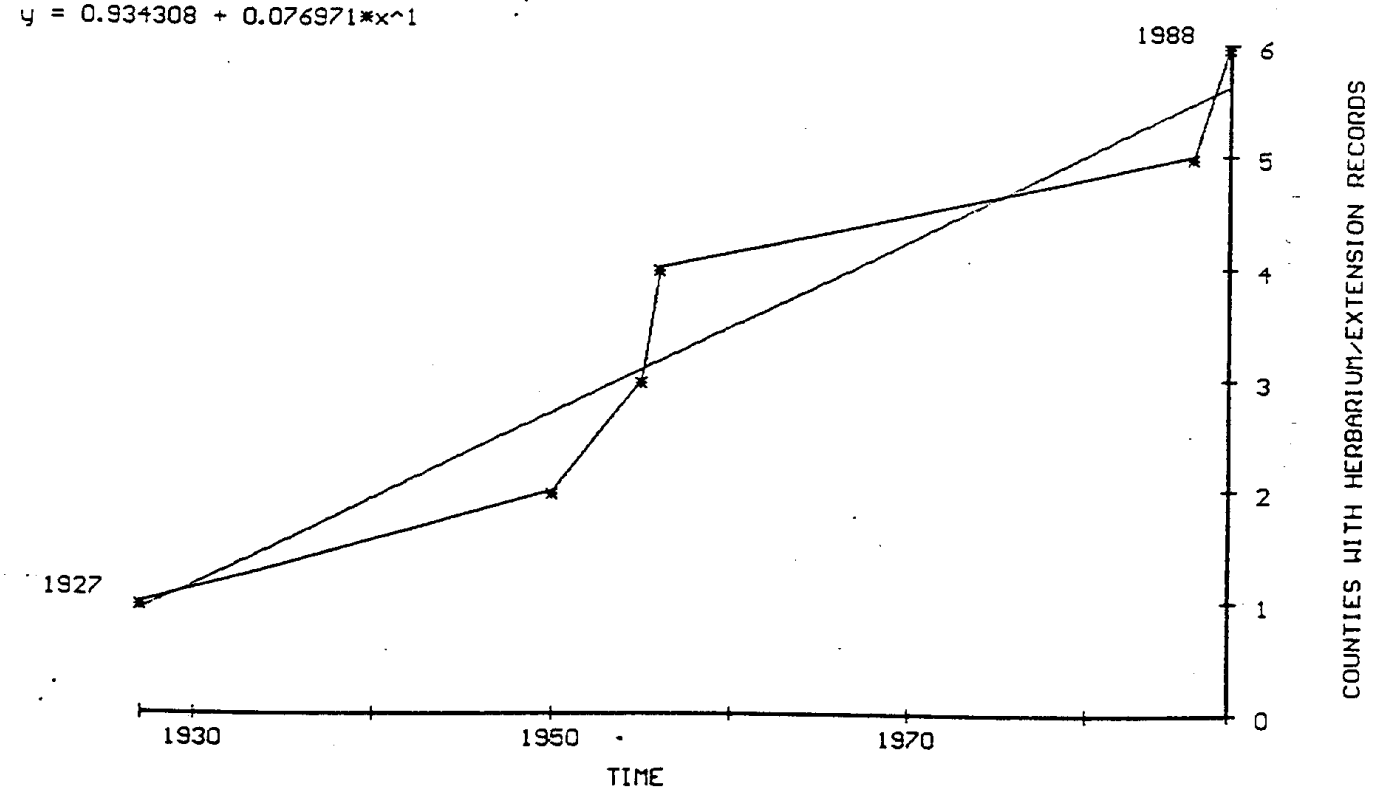
XANTHIUM SPINOSUM INCREASE IN NORTHWEST STATES
y = 1.681291 + 0.147901*x^1 + 0.001405*x^2



(REL 6.2) COUNTIES REPORTING ZYGOPHYLLUM FABAGO (SYRIAN BEANCAPER), 1875-1995.



ZYGOPHYLLUM FABAGO INCREASE IN NORTHWEST STATES
y = 0.934308 + 0.076971*x^1



Genus	Species	Common_name
Aeginetia	spp.	
Ageratina	adenophora	gland-bearing thoroughwort
Alectra	spp.	
Alhagi	pseudalhagi	camelthorn
Alternanthera	sessilis	dwarf copperleaf
Avena	sterilis	animated oat
Azolla	pinnata	feathered waterfern
Borreria	alata	winged borreria
Carthamus	lanatus	distaff thistle
Carthamus	leucocaulos	white-stemmed thistle
Carthamus	oxycantha	sharp eyed thistle
Centaurea	juncea	knapweed
Chrysopogon	aciculatus	small needled goldbeard
Commelina	benghalensis	spiderwort
Digitaria	abyssinica	bottomless crabgrass
Digitaria	scalarum	ladder crabgrass
Digitaria	velutina	velvety crabgrass
Drymaria	arenarioides	sandy drymaria
Eichhornia	azurea	peacock hyacinth
Emex	australis	southern dock
Emex	spinosa	spined dock
Eupatorium	adenophorum	gland-bearing thoroughwort
Euphorbia	prunifolia	plum-leafed spurge
Hydrilla	verticulata	whorled-leaved hydrilla
Imperata	brasiliensis	Brazillian imperata
Imperata	cylindrica	cylindrical imperata
Ipomoea	aquatica	water spinach
Ipomoea	triloba	three-lobed morning glory
Ischaemum	rugosum	wrinkle duck beak
Lagarosiphon	major	larger lagarosiphon
Leptochloa	chinensis	red sprangle top
Limnophila	sessiliflora	sedentary limnophila
Lycium	ferocissimum	ferocious boxthorn
Melastoma	malabathricum	Indian rhododendron
Mikania	cordata	heart-leaved mikania
Mikania	micrantha	small-leaved mikania
Mimosa	invisa	two-thrush mimosa
Mimosa	pigra	slow mimosa
Monochoria	hastata	sliverleaf monochoria
Monochoria	vaginalis	sheathed pickerel-weed
Nassella	trichotoma	cut hair nassella
Opuntia	aurantiaca	tiger pear
Orobanche	spp.	broomrape
Oryza	longistaminata	long-stamened rice
Oryza	punctata	punctured rice
Oryza	rufipogon	red-bearded rice
Ottelia	alismoides	
Paspalum	scrobiculatum	kodo millet
Pennisetum	clandestinum	kikuyu grass
Pennisetum	macrourum	
Pennisetum	pedicellatum	
Prosopis	alapataco	alpataco
Prosopis	argentina	Argentine prosopis
Prosopis	articulata	jointed prosopis
Prosopis	burkartii	
Prosopis	calingastana	cusqui
Prosopis	caldenia	calden
Prosopis	campestris	field prosopis
Prosopis	castellanosii	

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Genus	Species	Common_name
Prosopis	denudans	algarrobo patagonica
Prosopis	elata	lofty prosopis
Prosopis	farcta	stuffed prosopis
Prosopis	ferox	fierce prosopis
Prosopis	fiebrigii	
Prosopis	hassleri	algarrobo
Prosopis	humilis	low prosopis
Prosopis	kuntzei	itin
Prosopis	pallida	cloaked prosopis
Prosopis	palmeri	palm leaved prosopis
Prosopis	reptans	creeping prosopis
Prosopis	rojasiana	
Prosopis	ruscifolia	broom leaved prosopis
Prosopis	ruizlealii	
Prosopis	sericantha	silken prosopis
Prosopis	strombulifera	spreading prosopis
Prosopis	torquata	tintitaco
Rottboellia	cochinchinensis	Kelly grass
Rottboellia	exaltata	itch grass
Rubus	fruiticosus	bramble
Rubus	moluccanus	robust blackberry
Sagittaria	sagittifolia	arrowhead
Salvinia	auriculata	auricled floating fern
Salvinia	biloba	two-lobed floating fern
Salvinia	herzogii	
Salvinia	molesta	disturbed floating fern
Salsola	vermiculata	tumbleweed
Setaria	pallide-fusca	kavatta grass
Solanum	torvum	turkeyberry
Sparganium	erectum	erect bur-reed
Stratiotes	aloides	water soldier
Striga	spp.	
Tridax	procumbens	
Urochloa	panicoides	

IV. COVER TYPES SUSCEPTIBLE TO NOXIOUS WEEDS

A data matrix of cover types susceptible to noxious weeds has been prepared. There are 206 records for noxious taxa and 84 cover type fields. This noxious species by cover type data matrix filename is CTXNOX62.DB in Paradox Dos 4.5 format, and CTXNOX62.ASC in ASCI delimited format.

Fields include 43 current cover types based on CRB specific, CRBS specific, Society Range Management (1994), Society of American Foresters (1980) definitions. Agricultural land use (CRBS12) is currently split into irrigated & non-irrigated categories. SAF213 "Grand fir" was added for exotics associated with interior Grand fir. The data matrix file also contains 36 additional SRM (1994) cover type fields that are subsets of potential vegetation types. Five SRM cover types are use for both current veg (SRM###C) analyses and potential vegetation type (SRM###P) analyses. The table "Columbia River Basin Cover Types" provides a hardcopy listing.

INVADERS Database Release 6.2 was interrogated to determine cover types occupied by the 113 noxious weed taxa that have been reported in the five state region. There are no reported distribution records for 93 taxa. Almost all the taxa without distribution records are from the Federal noxious weed list. Many of these species are from genera with numerous tropical or subtropical species.

Each Current Veg cover type field in the data matrix was coded for susceptibility to invasion by all taxa. Each SRM cover type used as a subset of Potential Vegetation Types was coded for susceptibility to invasion by each of the 27 priority taxa. Susceptibility values are:

D = "Disturbed": Weed species is successful because high intensity or frequency of disturbance impacts the soil surface or removes the normal canopy cover.

I = "Invasive": Weed species can obtain dominance or co-dominance even in the absence of intense or frequent disturbance.

C = "Closed": Cover type does not provide a suitable habitat for the weed species.

U = "Unknown": Insufficient distribution data, or ecological requirements of species has not been defined. These cases includes many species on the Federal noxious weed list. And/or cases where the cover type is poorly defined or a minor areal component of CRB project area so the probability of sampling for an exotic species distribution record is low.

Invasiveness coding was supplemented by several literature sources. The Fire Effects Information System database was queried for summary analyses for noxious weed species. FEIS summaries were available for 22 species.

Hard copy of the susceptibility values are from the cover type by noxious weed data matrix are provide in the attached tables:

"Current Veg CRB Cover Types"
"Current Veg CRBS Cover Types"
"Current Veg SAF Cover Types"
"Current Veg SRM Cover Types"
"SRM Cover Types Included in Potential Veg Types (SRM 101-319) (27 Priority Noxious Taxa)
"SRM Cover Types Included in Potential Veg Types (SRM 322-614) (27 Priority Noxious Taxa)

Ref	Ind#	Cover_type	Used_for
CRB	003	Shrub or herb/tree regen	Current
CRB	005	Alpine tundra	Current
CRB	006	Barren	Current
CRB	007	Herbaceous wetlands	Current
CRB	008	Pacific Silver fir / Mountain hemlock	Current
CRBS	01	Juniper woodlands	Current
CRBS	02	Mixed conifer woodlands	Current
CRBS	03	Juniper / sagebrush	Current
CRBS	04	Big sagebrush	Current
CRBS	05	Wetland / shrub	Current
CRBS	06	Agropyron bunchgrass	Current
CRBS	07	Native forbs	Current
CRBS	08	Exotic forbs / annual grasses	Current
CRBS	09	Grand fir / White fir	Current
CRBS	10	Whitebark pine / Alpine larch	Current
CRBS	11	Red fir	Current
CRBS	12i	Irrigated cropland / hay / pasture	Current
CRBS	12n	Non-irrigated cropland / hay / pasture	Current
CRBS	13	Fescue / Bunchgrass	Current
CRBS	19	Urban	Current
CRBS	20	Water	Current
SAF	205	Mountain hemlock	Current
SAF	206	Engelmann spruce / Subalpine fir	Current
SAF	208	Whitebark pine	Current
SAF	210	Interior Douglas-fir	Current
SAF	212	Western larch	Current
SAF	213	Grand fir	Current
SAF	215	Western white pine	Current
SAF	217	Aspen	Current
SAF	218	Lodgepole pine	Current
SAF	219	Limber pine	Current
SAF	227	Western redceder / Western hemlock	Current
SAF	233	Oregon white oak	Current
SAF	235	Cottonwood / Willow	Current
SAF	237	Interior Ponderosa pine	Current
SAF	243	Sierra Nevada mixed conifer	Current
SAF	245	Pacific Ponderosa pine	Current
SRM	104	Antelope bitterbrush / Bluebunch wheatgrass	Current
SRM	322	Curleaf mountain-mahogany / Bluebunch wheatgrass	Both
SRM	402	Mountain big sagebrush	Both
SRM	406	Low sagebrush	Both
SRM	414	Salt desert shrub	Both
SRM	421	Chokecherry / Serviceberry / Rose	Both
SRM	101	Bluebunch wheatgrass	Potential
SRM	102	Idaho fescue	Potential
SRM	103	Green fescue	Potential
SRM	105	Antelope bitterbrush / Idaho fescue	Potential
SRM	106	Bluegrass scabland	Potential
SRM	107	Western Juniper / Big sagebrush / Bluebunch wheatgrass	Potential
SRM	108	Alpine Idaho fescue	Potential
SRM	302	Bluebunch wheatgrass / Sandburg bluegrass	Potential
SRM	304	Idaho fescue / Bluebunch wheatgrass	Potential
SRM	306	Idaho fescue / Slender wheatgrass	Potential
SRM	307	Idaho fescue / Threeleaf sedge	Potential
SRM	308	Idaho fescue / Tufted hairgrass	Potential
SRM	311	Rough fescue / Bluebunch wheatgrass	Potential
SRM	312	Rough fescue / Idaho fescue	Potential
SRM	313	Tufted hairgrass / Sedge	Potential
SRM	314	Big sagebrush / Bluebunch wheatgrass	Potential
SRM	315	Big sagebrush / Idaho fescue	Potential

Ref	Ind#	Cover_type	Used_for
SRM	316	Big sagebrush / Rough fescue	Potential
SRM	317	Bitterbrush / Bluebunch wheatgrass	Potential
SRM	318	Bitterbrush / Idaho fescue	Potential
SRM	319	Bitterbrush / Rough fescue	Potential
SRM	324	Threetip sagebrush / Idaho fescue	Potential
SRM	401	Basin big sagebrush	Potential
SRM	403	Wyoming big sagebrush	Potential
SRM	404	Threetip sagebrush	Potential
SRM	405	Black sagebrush	Potential
SRM	407	Stiff sagebrush	Potential
SRM	408	Other sagebrush types	Potential
SRM	410	Alpine rangeland	Potential
SRM	411	Aspen woodland	Potential
SRM	412	Juniper / Pinyon woodland	Potential
SRM	415	Curleaf mountain-mahogany	Potential
SRM	419	Bittercherry	Potential
SRM	420	Snowbush	Potential
SRM	422	Riparian	Potential
SRM	614	Crested wheatgrass	Potential

Genus	Species	Common_name	#Rec_rel6.2	CRB003	CRB005	CRB006	CRB007	CRB008
Abutilon	theophrasti	velvetleaf	79	D	U	C	D	U
Aegilops	cylindrica	jointed goatgrass	35	U	U	C	U	U
Aeginetia	spp.		0	U	U	U	U	U
Ageratina	adenophora	gland-bearing thoroughwort	0	U	U	U	U	U
Agropyron	repens	quackgrass	413	D	D	C	I	D
Alectra	spp.		0	U	U	U	U	U
Alhagi	pseudalhagi	camelthorn	0	U	U	U	U	U
Alopecurus	myosuroides	black twitch	8	U	U	U	U	U
Alternanthera	sessilis	dwarf copperleaf	0	U	U	U	U	U
Ambrosia	tomentosa	skeletonleaf bursage	14	U	U	U	U	U
Anchusa	officinalis	common bugloss	49	D	U	C	U	U
Anthriscus	sylvestris	cow parsely	9	D	U	U	D	U
Arctium	minus	common burdock	182	D	C	C	I	C
Artemisia	absinthium	absinth wormwood	177	D	C	C	I	D
Avena	sterilis	animated oat	0	U	U	U	U	U
Azolla	pinnata	feathered waterfern	0	U	U	C	D	U
Borreria	alata	winged borreria	0	U	U	U	U	U
Bromus	tectorum	downy brome	1045	D	C	C	D	D
Bryonia	alba	white bryony	71	D	C	C	D	C
Cardaria	draba	hoary cress	320	D	C	C	D	D
Cardaria	pubescens	hairy whitetop	68	D	C	C	D	D
Carduus	acantholdes	plumeless thistle	24	D	C	C	D	C
Carduus	nutans	musk thistle	292	D	C	C	D	D
Carduus	pycnocephalus	Italian thistle	10	U	U	U	U	U
Carduus	tenuiflorus	distaff thistle	3	U	U	U	U	U
Carthamus	baeticus		1	U	U	U	U	U
Carthamus	lanatus	distaff thistle	0	U	U	U	U	U
Carthamus	leucocaulos	white-stemmed thistle	0	U	U	U	U	U
Carthamus	oxycantha	sharp eyed thistle	0	U	U	U	U	U
Cenchrus	longispinus	longspine sandbur	49	D	U	C	D	U
Centaurea	calcitrapa	purple starthistle	15	U	U	U	U	U
Centaurea	diffusa	diffuse knapweed	646	D	C	D	D	D
Centaurea	iberica	Iberian starthistle	3	U	U	U	U	U
Centaurea	juncea	knapweed	0	U	U	U	U	U
Centaurea	juncea x nigra	knapweed	24	D	C	U	U	C
Centaurea	macrocephala	bighead knapweed	11	D	U	U	U	U
Centaurea	maculosa	spotted knapweed	1096	D	C	D	D	D
Centaurea	nigra	black knapweed	29	D	C	U	U	U
Centaurea	nigrescens	knapweed	11	U	U	U	D	U
Centaurea	pratensis	meadow knapweed	130	D	C	C	D	D
Centaurea	repens	Russian knapweed	576	D	C	D	D	D
Centaurea	solstitialis	yellow starthistle	213	D	C	D	I	D

Genus	Species	Common_name	#Rec_rel6.2	CRB003	CRB005	CRB006	CRB007	CRB008
Centaurea	virgata	squarrose knapweed	11	D	C	D	D	D
Chaenorrhinum	minus	dwarf snapdragon	18	U	U	U	U	U
Chondrilla	juncea	rush skeletonweed	96	I	C	D	C	D
Chrysanthemum	leucanthemum	oxeye daisy	276	D	C	D	I	D
Chrysopogon	aciculatus	small needled goldbeard	0	U	U	U	U	U
Cirsium	arvense	Canada thistle	891	D	D	C	I	D
Cirsium	vulgare	bull thistle	427	D	D	C	D	D
Commelina	benghalensis	spiderwort	0	U	U	U	U	U
Conium	maculatum	poison hemlock	195	D	C	C	I	C
Convolvulus	arvensis	field bindweed	353	D	C	C	I	D
Crupina	vulgaris	common crupina	34	D	C	C	C	C
Cuscuta	approximata	clustered dodder	37	U	C	C	D	C
Cuscuta	spp.	dodder	8	U	C	C	D	C
Cynoglossum	officinale	houndstongue	400	D	C	C	I	D
Cyperus	esculentus	yellow nutsedge	31	D	U	U	D	U
Cytisus	monspessulanus	French broom	1	D	U	U	U	U
Cytisus	scoparius	Scotch broom	126	D	C	C	D	C
Daucus	carota	wild carrot	137	D	C	C	I	C
Digitaria	abyssinica	bottomless crabgrass	0	U	U	U	U	U
Digitaria	scalarum	ladder crabgrass	0	U	U	U	U	U
Digitaria	velutina	velvety crabgrass	0	U	U	U	U	U
Drymaria	arenarioides	sandy drymaria	0	U	U	U	U	U
Echium	vulgare	blueweed	36	D	U	C	U	U
Egeria	densa	Brazillian elodea	37	C	C	C	I	C
Eichhornia	azurea	peacock hyacinth	0	U	U	U	D	U
Emex	australis	southern dock	0	U	U	U	U	U
Emex	spinosa	spined dock	0	U	U	U	D	U
Equisetum	arvense	field horsetail	206	D	D	C	I	D
Equisetum	telmateia	giant horsetail	70	U	U	C	I	U
Eruca	sativa	garden rocket	11	U	U	U	U	U
Eupatorium	adenophorum	gland-bearing thoroughwort	0	U	U	U	U	U
Euphorbia	dentata	toothed spurge	3	U	U	U	U	U
Euphorbia	esula	leafy spurge	745	D	C	C	D	C
Euphorbia	prunifolia	plum-leafed spurge	0	U	U	U	U	U
Galega	officinalis	goat's rue	1	U	U	U	U	U
Gypsophila	paniculata	babysbreath	55	D	U	C	U	U
Halogeton	glomeratus	halogeton	47	D	C	D	C	C
Hellanthus	ciliaris	Texas blueweed	4	U	U	U	U	U
Hemizonia	pungens	spikeweed	39	D	U	U	U	U
Heracleum	mantegazzianum	giant hogweed	9	U	U	U	D	U
Hibiscus	trionum	Venice mallow	39	D	C	C	U	C
Hieracium	aurantiacum	orange hawkweed	63	D	D	C	I	D

Genus	Species	Common_name	#Rec_rel6.2	CRB003	CRB005	CRB006	CRB007	CRB008
Hieracium	pilosella	mouse ear hawkweed	6	U	U	U	U	U
Hieracium	pratense	yellow hawkweed	24	C	C	D	D	D
Hydrilla	verticulata	whorled-leaved hydrilla	0	U	U	C	I	U
Hygrophila	polysperma	many-seeded hydrilla	1	U	U	U	U	U
Hyoscyamus	niger	black henbane	187	D	C	C	D	C
Hypericum	perforatum	common St. Johns wort	487	D	C	D	I	D
Hypochaeris	radicata	spotted cats ear	120	D	C	C	I	C
Imperata	brasiliensis	Brazillian imperata	0	U	U	U	U	U
Imperata	cylindrica	cylindrical imperata	0	U	U	U	U	U
Ipomoea	aquatica	water spinach	0	U	U	U	U	U
Ipomoea	triloba	three-lobed morning glory	0	U	U	U	U	U
Isatis	tinctoria	dyer's woad	107	D	C	D	D	C
Ischaemum	rugosum	wrinkle duck beak	0	U	U	U	U	U
Kochia	scoparia	kochia	178	D	C	C	D	C
Lagarosiphon	major	larger lagarosiphon	0	U	U	C	I	U
Lamium	hybridum	dead-nettle	2	U	U	U	U	U
Lepidium	latifolium	perennial pepperweed	75	D	C	C	D	C
Leptochloa	chinensis	red sprangle top	0	U	U	U	D	U
Lepyrodiclis	holosteoides		5	U	U	U	U	U
Limnophila	sessiliflora	sedentary limnophila	0	U	U	U	D	U
Linaria	dalmatica	dalmatian toadflax	285	D	D	D	D	D
Linaria	vulgaris	yellow toadflax	359	D	C	D	I	D
Lychnis	alba	white campion	187	D	C	C	D	C
Lycium	ferocissimum	ferocious boxthorn	0	U	U	U	U	U
Lysimachia	vulgaris	garden loosestrife	6	U	U	U	U	U
Lythrum	salicaria	purple loosestrife	288	C	C	C	I	D
Lythrum	virgatum	wandlike loosestrife	1	U	U	U	U	U
Matricaria	maritima	false chamomile	73	D	C	C	D	C
Melastoma	malabathricum	Indian rhododendron	0	U	U	U	U	U
Mikania	cordata	heart-leaved mikania	0	U	U	U	U	U
Mikania	micrantha	small-leaved mikania	0	U	U	U	U	U
Milium	vernale	spring millet grass	7	U	U	U	U	U
Mimosa	invisa	two-thrush mimosa	0	U	U	U	U	U
Mimosa	pigra	slow mimosa	0	U	U	U	U	U
Mirabilis	nyctaginea	wild four o'clock	39	D	C	D	U	C
Monochoria	hastata	sliverleaf monochoria	0	U	U	U	D	U
Monochoria	vaginalis	sheathed pickerel-weed	0	U	U	U	D	U
Myriophyllum	brasiliense	parrotfeather	33	C	C	C	I	C
Myriophyllum	spicatum	Eurasian watermilfoil	138	C	C	C	I	C
Nardus	stricta	moor matgrass	3	U	U	U	D	U
Nassella	trichotoma	cut hair nassella	0	U	U	U	U	U
Onopordum	acanthium	Scotch thistle	118	D	C	D	D	C

Genus	Species	Common_name	#Rec_rel6.2	CRB003	CRB005	CRB006	CRB007	CRB008
Opuntia	aurantiaca	tiger pear	0	U	C	D	C	C
Orobanche	spp.	broomrape	0	U	U	C	D	U
Oryza	longistaminata	long-stamened rice	0	U	U	C	I	U
Oryza	punctata	punctured rice	0	U	U	C	I	U
Oryza	rufipogon	red-bearded rice	0	U	U	C	I	U
Ottelia	alismoides		0	U	U	C	I	U
Panicum	miliaceum	wild proso millet	62	D	U	C	U	U
Paspalum	scrobiculatum	kodo millet	0	U	U	C	I	U
Peganum	harmala	African rue	9	U	U	U	U	U
Pennisetum	clandestinum	kikuyu grass	0	U	U	U	U	U
Pennisetum	macrourum		0	U	U	U	U	U
Pennisetum	pedicellatum		0	U	U	U	U	U
Picris	hieracoides	bitterweed	5	D	U	U	U	U
Polygonum	cuspidatum	Japanese knotweed	83	D	C	C	D	D
Potentilla	recta	sulfur cinquefoil	298	I	C	D	I	D
Proboscidea	louisianica	devil's claw	13	U	U	U	D	U
Prosopis	alapataco	alpataco	0	U	U	U	U	U
Prosopis	argentina	Argentine prosopis	0	U	U	U	U	U
Prosopis	articulata	jointed prosopis	0	U	U	U	U	U
Prosopis	burkartii		0	U	U	U	U	U
Prosopis	caldenia	calden	0	U	U	U	U	U
Prosopis	calingastana	cusqui	0	U	U	U	U	U
Prosopis	campestris	field prosopis	0	U	U	U	U	U
Prosopis	castellanosii		0	U	U	U	U	U
Prosopis	denudans	algarrobo patagonica	0	U	U	U	U	U
Prosopis	elata	lofty prosopis	0	U	U	U	U	U
Prosopis	farcta	stuffed prosopis	0	U	U	U	U	U
Prosopis	ferox	fierce prosopis	0	U	U	U	U	U
Prosopis	fiebrigii		0	U	U	U	U	U
Prosopis	hassleri	algarrobo	0	U	U	U	U	U
Prosopis	humilis	low prosopis	0	U	U	U	U	U
Prosopis	kuntzei	itin	0	U	U	U	U	U
Prosopis	pallida	cloaked prosopis	0	U	U	U	U	U
Prosopis	palmeri	palm leaved prosopis	0	U	U	U	U	U
Prosopis	reptans	creeping prosopis	0	U	U	U	U	U
Prosopis	rojasiana		0	U	U	U	U	U
Prosopis	ruizlealii		0	U	U	U	U	U
Prosopis	ruscifolia	broom leaved prosopis	0	U	U	U	U	U
Prosopis	sericantha	silken prosopis	0	U	U	U	U	U
Prosopis	strombulifera	spreading prosopis	0	U	U	U	U	U
Prosopis	torquata	tintitaco	0	U	U	U	U	U
Rorippa	austriaca	Austrian fieldcress	8	U	U	U	U	U

Genus	Species	Common_name	#Rec_rel6.2	CRB003	CRB005	CRB006	CRB007	CRB008
Rorippa	sylvestris	yellow fieldcress	31	C	U	C	I	U
Rottboellia	cochinchinensis	Kelly grass	0	U	U	U	U	U
Rottboellia	exaltata	itch grass	0	U	U	U	U	U
Rubus	fruticosus	bramble	0	U	U	U	D	U
Rubus	moluccanus	robust blackberry	0	U	U	U	D	U
Sagittaria	sagittifolia	arrowhead	0	C	C	C	I	C
Salsola	vermiculata	tumbleweed	0	U	U	U	U	U
Salvia	aethiopis	Mediterranean sage	100	U	U	U	U	U
Salvinia	auriculata	auricled floating fern	0	U	U	C	U	U
Salvinia	biloba	two-lobed floating fern	0	U	U	C	U	U
Salvinia	herzogii		0	U	U	C	U	U
Salvinia	molesta	disturbed floating fern	0	U	U	C	U	U
Secale	cereale	cultivated rye	99	D	C	C	D	C
Senecio	jacobaea	tansy ragwort	126	D	C	C	D	C
Setaria	pallide-fusca	kavatta grass	0	U	U	U	U	U
Silybum	marianum	blessed milkthistle	43	D	C	C	U	C
Solanum	dulcamara	bittersweet nightshade	360	D	C	D	I	C
Solanum	elaeagnifolium	silverleaf nightshade	5	U	U	U	U	U
Solanum	rostratum	buffalobur	150	D	C	C	D	C
Solanum	torvum	turkeyberry	0	U	U	U	U	U
Sonchus	arvensis	perennial sowthistle	174	D	D	C	I	D
Sorghum	halepense	Johnsongrass	34	D	C	C	I	C
Sparganium	erectum	erect bur-reed	0	U	U	C	D	U
Spartina	alterniflora	smooth cord grass	4	U	U	U	U	U
Spartina	anglica	cordgrass	1	U	U	U	D	U
Sphaerophysa	salsula	Swainsonpea	46	U	U	U	D	U
Stratiotes	aloides	water soldier	0	U	U	C	D	U
Striga	spp.		0	U	U	U	U	U
Taeniatherum	caput-medusae	medusahead	65	D	C	C	D	D
Tanacetum	vulgare	common tansy	267	D	C	D	I	C
Torilis	arvensis	field hedge-parsley	12	U	U	U	U	U
Tribulus	terrestris	punctureVine	84	D	C	I	D	C
Tridax	procumbens		0	U	U	U	U	U
Ulex	europaeus	gorse	31	D	C	C	D	C
Urochloa	panicoides		0	U	U	U	U	U
Verbascum	thapsus	common mullein	491	D	C	C	I	D
Xanthium	spinosum	spiny cocklebur	85	D	C	C	D	C
Zygophyllum	fabago	Syrian beancaper	13	U	U	U	U	U

Genus	Species	CRBS 01	CRBS 02	CRBS 03	CRBS 04	CRBS 05	CRBS 06	CRBS 07	CRBS 08	CRBS 09	CRBS 10	CRBS 11	CRBS 12l	CRBS 12n	CRBS 13	CRBS 19	CRBS 20
Abutilon	theophrasti	U	D	U	U	D	D	D	D	U	U	U	D	D	D	D	C
Aegilops	cylindrica	U	U	U	U	U	D	U	D	U	U	U	D	D	D	D	C
Aeginetia	spp.	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ageratina	adenophora	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Agropyron	repens	C	D	C	C	I	D	D	I	D	D	D	I	I	I	I	C
Alectra	spp.	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Alhagi	pseudalhagi	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Alopecurus	myosuroides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Alternanthera	sessilis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ambrosia	tomentosa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Anchusa	officinalis	U	D	U	U	U	D	D	D	U	U	U	D	D	D	D	C
Anthriscus	sylvestris	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	C
Arctium	minus	C	D	C	C	D	D	D	I	D	C	C	D	D	D	I	C
Artemisia	absinthium	D	D	D	D	D	D	D	I	D	C	D	D	D	D	I	C
Avena	sterilis	U	U	U	U	U	D	U	D	U	U	U	D	D	D	U	C
Azolla	pinnata	U	U	U	U	U	U	D	U	U	U	U	U	U	U	U	D
Borreria	alata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromus	tectorum	D	I	D	D	D	I	D	I	D	C	D	D	D	I	I	C
Bryonia	alba	C	D	C	C	D	D	D	D	D	C	C	D	D	D	I	C
Cardaria	draba	D	D	D	D	D	D	D	I	D	C	D	I	I	D	I	C
Cardaria	pubescens	D	D	D	D	D	D	D	I	D	C	D	I	I	D	I	C
Carduus	acanthoides	C	D	C	C	D	D	D	D	C	C	C	D	D	D	D	C
Carduus	nutans	D	D	D	U	I	D	D	D	D	C	D	D	D	I	D	C
Carduus	pycnocephalus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	U
Carduus	tenuiflorus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	baeticus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	lanatus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	leucocaulos	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	oxycantha	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cenchrus	longispinus	U	D	U	U	D	D	D	D	U	U	U	D	D	D	U	C
Centaurea	calcitrapa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	C
Centaurea	diffusa	D	D	D	D	D	D	D	D	D	C	D	D	D	D	I	C
Centaurea	iberica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	C
Centaurea	juncea	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	C
Centaurea	juncea x nigra	U	D	U	U	U	D	D	D	U	C	C	D	D	D	D	C
Centaurea	macrocephala	U	U	U	U	U	U	U	U	U	C	U	U	U	U	U	C
Centaurea	maculosa	D	I	D	D	I	D	D	D	D	C	D	D	I	I	I	C
Centaurea	nigra	U	D	U	U	U	D	D	D	U	C	C	D	D	D	D	C
Centaurea	nigrescens	U	U	U	U	D	U	U	U	U	C	U	D	U	U	U	C
Centaurea	pratensis	D	D	D	D	D	D	D	I	D	C	D	D	D	D	I	C
Centaurea	repens	U	D	U	U	D	D	D	D	D	C	D	D	I	D	I	C
Centaurea	solstitialis	D	D	D	D	D	D	D	I	D	C	D	D	I	D	I	C

Genus	Species	CRBS 01	CRBS 02	CRBS 03	CRBS 04	CRBS 05	CRBS 06	CRBS 07	CRBS 08	CRBS 09	CRBS 10	CRBS 11	CRBS 12i	CRBS 12n	CRBS 13	CRBS 19	CRBS 20
Centaurea	virgata	D	D	D	D	D	D	D	I	D	C	D	D	D	D	D	C
Chaenorrhinum	minus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	U
Chondrilla	juncea	D	D	D	D	C	D	D	I	D	C	D	I	I	D	D	C
Chrysanthemum	leucanthemum	U	U	U	U	D	D	D	D	D	C	D	D	I	D	I	C
Chrysopogon	aciculatus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cirsium	arvense	D	I	D	D	I	I	D	D	D	D	D	D	D	I	I	D
Cirsium	vulgare	D	D	D	D	I	D	D	D	D	D	D	D	D	I	D	C
Commelina	benghalensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Conium	maculatum	C	D	C	C	D	D	D	I	D	C	C	D	D	D	I	C
Convolvulus	arvensis	D	D	D	D	D	D	D	I	D	C	D	I	I	D	I	C
Crupina	vulgaris	C	C	C	C	C	D	D	D	C	C	C	D	D	D	D	C
Cuscuta	approximata	U	U	U	U	D	U	D	U	U	C	C	D	D	U	U	C
Cuscuta	spp.	U	U	U	U	D	U	D	U	U	C	C	D	D	U	U	C
Cynoglossum	officinale	D	D	D	D	I	D	D	D	D	C	D	D	D	I	D	C
Cyperus	esculentus	U	U	U	U	D	D	D	D	U	U	U	D	D	D	D	U
Cytisus	monspessulanus	U	U	U	U	U	D	D	D	U	U	U	U	D	D	U	U
Cytisus	scoparius	C	D	C	C	D	D	D	I	D	C	C	D	D	D	I	C
Daucus	carota	C	D	C	C	D	D	D	I	D	C	C	D	D	D	I	C
Digitaria	abyssinica	U	U	U	U	U	U	U	D	U	U	U	U	U	U	D	U
Digitaria	scalarum	U	U	U	U	U	U	U	D	U	U	U	U	U	U	D	U
Digitaria	velutina	U	U	U	U	U	U	U	D	U	U	U	U	U	U	D	U
Drymaria	arenarioides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Echium	vulgare	U	D	U	U	U	D	D	D	U	U	U	D	D	D	D	C
Egeria	densa	C	C	C	C	I	C	D	C	D	C	C	D	C	C	D	I
Eichhornia	azurea	U	U	U	U	D	U	D	U	U	U	U	U	U	U	U	I
Emex	australis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Emex	spinosa	U	U	U	U	U	U	U	D	U	U	U	U	U	U	U	U
Equisetum	arvense	C	D	C	C	D	D	D	I	U	D	D	D	D	D	D	I
Equisetum	telmateia	C	U	C	C	I	U	D	D	U	U	U	U	U	U	D	D
Eruca	sativa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Eupatorium	adenophorum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Euphorbia	dentata	U	U	U	U	U	U	U	D	U	U	U	U	U	U	U	U
Euphorbia	esula	D	D	D	D	D	D	D	D	D	C	C	D	I	I	I	C
Euphorbia	prunifolia	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Galega	officinalis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Gypsophila	paniculata	U	D	U	U	U	D	D	I	U	U	U	D	D	D	D	C
Halogeton	glomeratus	D	D	D	D	C	D	D	D	C	C	C	D	D	D	D	C
Helianthus	ciliaris	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U	U
Hemizonia	pungens	U	D	U	U	U	D	D	D	U	U	U	D	D	D	D	C
Heracleum	mantegazzianum	U	U	U	U	D	U	U	U	U	U	U	U	U	U	D	U
Hibiscus	trionum	U	D	U	U	U	D	D	D	U	C	C	D	D	D	D	C
Hieracium	aurantiacum	C	C	C	C	D	C	C	D	D	D	D	I	D	C	D	C

Genus	Species	CRBS 01	CRBS 02	CRBS 03	CRBS 04	CRBS 05	CRBS 06	CRBS 07	CRBS 08	CRBS 09	CRBS 10	CRBS 11	CRBS 12i	CRBS 12n	CRBS 13	CRBS 19	CRBS 20
Hieracium	pilosella	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	U
Hieracium	pratense	C	C	C	C	D	C	C	D	U	C	D	I	D	C	D	D
Hydrilla	verticulata	C	U	C	C	I	U	U	U	D	U	U	U	U	U	U	I
Hygrophila	polysperma	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	U
Hyoscyamus	niger	D	D	D	D	D	D	D	D	U	C	C	D	D	D	D	C
Hypericum	perforatum	D	D	D	D	I	D	D	I	D	C	D	D	D	D	D	C
Hypochaeris	radicata	C	D	C	C	D	D	D	I	C	C	C	D	D	D	I	C
Imperata	brasillensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Imperata	cylindrica	U	U	U	U	U	U	D	D	U	U	U	U	U	U	U	U
Ipomoea	aquatica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ipomoea	triloba	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Isatis	tinctoria	D	D	I	I	D	I	D	I	C	C	C	I	I	I	D	C
Ischaemum	rugosum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Kochia	scoparia	D	D	D	D	D	D	D	D	C	C	C	D	D	D	I	C
Lagarosiphon	major	C	U	C	C	I	U	U	U	D	U	U	U	U	U	U	I
Lamium	hybridum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	U
Lepidium	latifolium	D	D	D	D	D	D	D	D	C	C	C	I	D	D	D	C
Leptochloa	chinensis	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	D
Lepyrodiclis	holosteoides	U	U	U	U	U	U	U	D	U	U	U	U	D	U	U	U
Limnophila	sessiliflora	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	I
Linaria	dalmatica	D	D	D	D	D	D	D	I	D	D	D	D	D	D	I	C
Linaria	vulgaris	D	D	D	D	D	D	D	I	D	C	D	D	I	I	I	C
Lychnis	alba	C	D	C	C	D	D	D	D	D	C	C	D	D	I	D	C
Lycium	ferocissimum	U	U	U	U	U	U	U	D	U	U	U	U	U	U	D	U
Lysimachia	vulgaris	U	U	U	U	U	U	U	U	U	U	U	U	U	U	D	U
Lythrum	salicaria	C	C	C	C	I	C	D	D	D	C	D	D	C	C	D	I
Lythrum	virgatum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Matricaria	maritima	C	D	C	C	D	D	D	D	D	C	C	D	D	D	D	C
Melastoma	malabathricum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mikania	cordata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mikania	micrantha	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Milium	vernale	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mimosa	invisa	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Mimosa	pigra	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mirabilis	nyctaginea	U	C	U	U	U	D	D	D	U	C	C	D	D	D	D	C
Monochoria	hastata	U	U	U	U	D	U	D	U	U	U	U	U	U	U	U	I
Monochoria	vaginalis	U	U	U	U	D	U	D	U	U	U	U	U	U	U	U	I
Myriophyllum	brasiliense	C	C	C	C	I	C	D	C	D	C	C	D	C	C	D	I
Myriophyllum	spicatum	C	C	C	C	I	C	D	C	D	C	C	D	C	C	D	I
Nardus	stricta	U	U	U	U	D	D	D	D	U	U	U	U	D	D	D	U
Nassella	trichotoma	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Onopordum	acanthium	U	U	U	D	D	D	D	D	U	C	C	D	D	D	U	C

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Genus	Species	CRBS 01	CRBS 02	CRBS 03	CRBS 04	CRBS 05	CRBS 06	CRBS 07	CRBS 08	CRBS 09	CRBS 10	CRBS 11	CRBS 12i	CRBS 12n	CRBS 13	CRBS 19	CRBS 20
Opuntia	aurantiaca	D	D	D	D	C	U	U	U	C	C	C	U	U	U	U	C
Orobanche	spp.	U	U	D	D	D	D	D	D	U	U	U	D	D	D	U	U
Oryza	longistaminata	U	U	U	U	I	U	D	U	U	U	U	U	U	U	U	I
Oryza	punctata	U	U	U	U	I	U	D	U	U	U	U	U	U	U	U	I
Oryza	rufipogon	U	U	U	U	I	U	D	U	U	U	U	U	U	U	U	I
Ottelia	alismoides	C	U	C	C	I	U	U	U	D	U	U	U	U	U	U	I
Panicum	millaceum	U	D	U	U	U	D	D	D	U	U	U	D	D	D	I	C
Paspalum	scrobiculatum	U	U	U	U	I	U	D	U	U	U	U	D	D	U	U	D
Peganum	harmala	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Pennisetum	clandestinum	U	U	U	U	U	D	D	D	U	U	U	U	D	D	U	U
Pennisetum	macrourum	U	U	U	U	U	D	D	D	U	U	U	U	D	D	U	U
Pennisetum	pedicellatum	U	U	U	U	U	D	D	D	U	U	U	U	D	D	U	U
Picris	hieracoides	U	U	U	U	U	U	U	D	U	U	U	U	U	U	U	U
Polygonum	cuspidatum	C	C	C	C	D	C	D	D	D	C	C	D	D	C	D	D
Potentilla	recta	D	I	U	U	D	I	I	I	D	C	D	D	I	I	I	C
Proboscidea	louisianica	U	U	U	U	U	U	U	D	U	U	U	U	U	U	D	U
Prosopis	alapataco	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	argentina	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	articulata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	burkartii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	caldenia	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	calingastana	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	campestris	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	castellanosii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	denudans	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	elata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	farcta	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	ferox	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	fiebrigii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	hassleri	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	humilis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	kuntzei	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	pallida	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	palmeri	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	reptans	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	rojasiana	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	ruizlealii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	ruscifolia	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	sericantha	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	strombulifera	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	torquata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Rorippa	austriaca	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

Current Veg CRBS Cover Types

Genus	Species	CRBS 01	CRBS 02	CRBS 03	CRBS 04	CRBS 05	CRBS 06	CRBS 07	CRBS 08	CRBS 09	CRBS 10	CRBS 11	CRBS 12l	CRBS 12n	CRBS 13	CRBS 19	CRBS 20
Rorippa	sylvestris	C	C	C	C	I	C	D	C	D	U	U	U	C	C	D	C
Rottboellia	cochinchinensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Rottboellia	exaltata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Rubus	fruiticosus	U	U	U	U	D	U	D	U	U	U	U	U	U	U	U	U
Rubus	moluccanus	U	U	U	U	D	U	D	U	U	U	U	U	U	U	U	U
Sagittaria	sagittifolia	C	C	C	C	I	C	U	C	D	C	C	U	C	C	U	I
Salsola	vermiculata	U	U	U	U	U	U	U	D	U	U	U	U	D	U	U	U
Salvia	aethiopis	U	U	U	U	U	U	U	D	U	U	U	U	U	U	U	C
Salvinia	auriculata	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	D
Salvinia	biloba	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	D
Salvinia	herzogii	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	D
Salvinia	molesta	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	D
Secale	cereale	D	D	D	D	D	D	D	D	D	C	D	D	D	D	I	C
Seneclo	jacobaea	C	D	C	C	D	D	D	I	D	C	C	D	I	D	D	C
Setaria	pallide-fusca	U	U	U	U	U	U	U	D	U	U	U	D	D	U	U	C
Silybum	marianum	U	D	U	U	U	D	D	I	U	C	C	D	D	D	D	C
Solanum	dulcamara	C	D	C	C	I	D	D	D	D	C	C	D	D	D	I	D
Solanum	elaeagnifolium	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Solanum	rostratum	C	D	C	C	D	D	D	D	D	C	C	D	D	D	D	C
Solanum	torvum	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U	U
Sonchus	arvensis	D	D	D	D	D	D	D	D	D	D	D	D	I	D	D	D
Sorghum	halepense	D	D	D	D	D	D	D	D	C	C	C	I	I	D	D	C
Sparganium	erectum	U	U	U	U	D	U	U	U	U	U	U	U	U	U	U	I
Spartina	alterniflora	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Spartina	anglica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Sphaerophysa	salsula	U	U	U	U	D	U	U	D	U	U	U	U	U	U	U	U
Stratiotes	aloides	C	U	C	C	D	U	U	U	U	U	U	U	U	U	U	I
Striga	spp.	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Taeniatherum	caput-medusae	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	C
Tanacetum	vulgare	C	D	C	C	I	D	D	I	D	C	C	D	D	D	D	C
Torilis	arvensis	U	U	U	U	U	U	U	U	U	U	U	D	U	U	D	U
Tribulus	terrestris	D	D	D	D	D	D	D	I	C	C	C	D	D	D	I	C
Tridax	procumbens	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U	U
Ulex	europaeus	U	C	U	U	D	D	D	D	U	C	C	D	D	D	D	C
Urochloa	panicoides	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U	U
Verbascum	thapsus	D	D	D	D	I	D	D	I	D	C	D	D	I	I	D	C
Xanthium	spinosum	C	D	C	C	D	D	D	D	D	C	C	D	D	D	D	C
Zygophyllum	fabago	U	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U

Genus	Species	SAF 205	SAF 206	SAF 208	SAF 210	SAF 212	SAF 213	SAF 215	SAF 217	SAF 218	SAF 219	SAF 227	SAF 233	SAF 235	SAF 237	SAF 243	SAF 245
Abutilon	theophrasti	U	U	U	D	D	U	D	D	D	D	U	D	D	D	D	U
Aegilops	cylindrica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aeginetia	spp.	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ageratina	adenophora	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Agropyron	repens	D	I	D	I	D	D	D	I	D	D	D	D	I	D	D	D
Alectra	spp.	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Alhagi	pseudalhagi	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Alopecurus	myosuroides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Alternanthera	sessilis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ambrosia	tomentosa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Anchusa	officinalis	U	U	U	D	D	U	D	D	D	D	U	D	U	D	D	D
Anthriscus	sylvestris	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Arctium	minus	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Artemisia	absinthium	D	D	C	I	D	D	D	D	D	D	D	D	D	D	D	D
Avena	sterilis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Azolla	pinnata	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Borreria	alata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromus	tectorum	D	I	C	I	D	D	D	D	D	D	D	D	D	I	D	D
Bryonia	alba	C	C	C	D	D	D	D	D	D	D	D	C	D	D	D	D
Cardaria	draba	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Cardaria	pubescens	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Carduus	acanthoides	D	C	C	D	D	C	D	D	D	D	C	D	D	D	D	D
Carduus	nutans	D	I	C	I	D	D	D	D	D	D	I	U	D	D	D	D
Carduus	pycnocephalus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carduus	tenuiflorus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	baeticus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	lanatus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	leucocaulos	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carthamus	oxycantha	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cenchrus	longispinus	U	U	U	D	D	U	D	D	D	D	U	D	D	D	D	D
Centaurea	calcitrapa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Centaurea	diffusa	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Centaurea	iberica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Centaurea	juncea	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Centaurea	juncea x nigra	C	U	C	D	D	U	D	D	D	D	U	D	U	D	D	D
Centaurea	macrocephala	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Centaurea	maculosa	D	D	C	I	D	I	D	D	D	D	D	D	I	I	D	D
Centaurea	nigra	C	U	C	D	D	U	D	D	D	D	U	D	U	D	D	D
Centaurea	nigrescens	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Centaurea	pratensis	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Centaurea	repens	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Centaurea	solstitialis	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D

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Centaurea	virgata	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Chaenorrhinum	minus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chondrilla	juncea	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Chrysanthemum	leucanthemum	D	I	C	D	D	D	D	D	D	D	I	D	I	D	D	D
Chrysopogon	aciculatus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cirsium	arvense	D	I	D	I	I	I	D	I	D	D	I	D	I	D	D	D
Cirsium	vulgare	D	I	D	I	D	I	D	D	D	D	I	D	D	D	D	D
Commelina	benghalensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Conium	maculatum	C	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Convolvulus	arvensis	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Crupina	vulgaris	C	C	C	D	D	C	D	D	D	D	C	D	C	D	D	D
Cuscuta	approximata	C	U	C	U	U	U	U	U	U	U	U	U	D	U	U	U
Cuscuta	spp.	C	U	C	U	U	U	U	U	U	U	U	U	U	U	U	U
Cynoglossum	officinale	D	D	C	I	D	D	D	I	D	D	D	D	D	I	D	U
Cyperus	esculentus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cytisus	monspessulanus	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cytisus	scoparius	C	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Daucus	carota	C	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Digitaria	abyssinica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Digitaria	scalarum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Digitaria	velutina	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Drymaria	arenarioides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Echium	vulgare	U	U	U	D	D	U	D	D	D	D	U	D	U	D	D	D
Egeria	densa	C	C	C	C	C	D	C	C	C	C	D	C	D	C	C	C
Elchhornia	azurea	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Emex	australis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Emex	spinosa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Equisetum	arvense	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Equisetum	telmateia	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Eruca	sativa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Eupatorium	adenophorum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Euphorbia	dentata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Euphorbia	esula	C	D	C	D	D	C	D	D	D	C	D	D	I	D	D	D
Euphorbia	prunifolia	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Galega	officinalis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Gypsophila	paniculata	U	U	U	D	D	U	D	D	D	D	U	D	U	D	D	D
Halogeton	glomeratus	C	C	C	D	D	C	D	D	D	D	C	D	C	D	D	D
Helianthus	ciliaris	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Hemizonia	pungens	U	U	U	D	D	U	D	D	D	D	U	D	D	D	D	D
Heracleum	mantegazzianum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Hibiscus	trionum	C	U	C	D	D	U	D	D	D	D	U	D	U	D	D	D
Hieracium	aurantiacum	D	D	D	D	D	D	D	D	D	D	D	C	D	C	C	C

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Hieracium	pilosella	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Hieracium	pratense	D	D	C	D	D	D	D	D	C	C	D	C	I	C	C	C
Hydrilla	verticulata	U	U	U	U	U	D	U	U	U	U	D	U	D	U	U	U
Hygrophila	polysperma	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Hyoscyamus	niger	C	U	C	D	D	U	D	D	D	D	U	D	D	D	D	D
Hypericum	perforatum	D	D	C	I	D	I	D	D	D	D	I	D	D	I	D	D
Hypochaeris	radicata	C	D	C	D	D	C	D	D	D	D	C	D	D	D	D	D
Imperata	brasiliensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Imperata	cylindrica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ipomoea	aquatica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ipomoea	triloba	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Isatis	tinctoria	C	C	C	D	D	C	D	D	D	D	C	D	D	D	D	D
Ischaemum	rugosum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Kochia	scoparia	C	C	C	D	D	C	D	D	D	D	C	D	D	D	D	D
Lagarosiphon	major	U	U	U	U	U	D	U	U	U	U	D	U	D	U	U	U
Lamium	hybridum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Lepidium	latifolium	C	C	C	D	D	C	D	D	D	D	C	D	I	D	D	D
Leptochloa	chinensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Lepyrodiclis	holosteoides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Limnophila	sessiliflora	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Linaria	dalmatica	D	D	D	D	D	D	D	D	D	D	D	U	D	D	D	D
Linaria	vulgaris	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Lychnis	alba	C	D	C	I	D	D	D	D	D	D	D	D	D	D	D	D
Lycium	ferocissimum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Lysimachia	vulgaris	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Lythrum	salicaria	D	D	C	C	C	D	C	C	C	C	D	C	D	C	C	C
Lythrum	virgatum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Matricaria	maritima	C	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Melastoma	malabathricum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mikania	cordata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mikania	micrantha	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Millum	vernale	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mimosa	invisa	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mimosa	pigra	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Mirabilis	nyctaginea	C	U	C	D	D	U	D	D	D	D	U	D	U	D	D	D
Monochoria	hastata	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Monochoria	vaginalis	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Myriophyllum	brasiliense	C	C	C	C	C	D	C	C	C	C	D	C	D	C	C	C
Myriophyllum	spicatum	C	C	C	C	C	D	C	C	C	C	D	C	D	C	C	C
Nardus	stricta	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Nassella	trichotoma	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Onopordum	acanthium	C	U	C	D	D	U	U	U	D	C	U	D	D	D	D	D

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Opuntia	aurantiaca	C	C	C	U	U	C	U	U	U	U	C	U	C	U	U	U
Orobanche	spp.	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Oryza	longistaminata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Oryza	punctata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Oryza	rufipogon	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ottelia	alismoides	U	U	U	U	U	D	U	U	U	U	D	U	D	U	U	U
Panicum	miliaceum	U	U	U	D	D	U	D	D	D	D	U	D	U	D	D	D
Paspalum	scrobiculatum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Peganum	harmala	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Pennisetum	clandestinum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Pennisetum	macrourum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Pennisetum	pedicellatum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Picris	hieracoides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Polygonum	cuspidatum	C	C	C	D	D	D	D	C	D	C	D	C	D	C	D	C
Potentilla	recta	D	D	C	I	D	D	D	D	D	D	D	D	D	I	D	D
Proboscidea	louisianica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	alapataco	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	argentina	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	articulata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	burkartii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	caldenia	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	calingastana	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	campestris	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	castellanosii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	denudans	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	elata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	farcta	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	ferox	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	fiebrigii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	hassleri	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	humilis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	kuntzei	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	palilda	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	palmeri	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	reptans	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	rojasiana	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	ruizlealii	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	ruscifolia	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	sericantha	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	strombulifera	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Prosopis	torquata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Rorippa	austriaca	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

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Rorippa	sylvestris	U	U	U	U	U	D	U	U	U	U	D	C	D	C	U	C
Rottboellia	cochinchinensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Rottboellia	exaltata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Rubus	fruiticosus	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Rubus	moluccanus	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Sagittaria	sagittifolia	C	C	C	C	C	D	C	C	C	C	D	C	D	C	C	C
Salsola	vermiculata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Salvia	aethiopis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Salvinia	auriculata	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Salvinia	biloba	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Salvinia	herzogli	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Salvinia	molesta	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Secale	cereale	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Senecio	jacobaea	C	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Setaria	pallide-fusca	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Silybum	marianum	D	U	C	D	D	U	D	D	D	D	U	D	U	D	D	D
Solanum	dulcamara	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Solanum	elaeagnifolium	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Solanum	rostratum	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Solanum	torvum	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Sonchus	arvensis	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Sorghum	halepense	C	C	C	D	D	C	D	D	D	D	C	D	D	D	D	D
Sparganium	erectum	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Spartina	alterniflora	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Spartina	anglica	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Sphaerophysa	salsula	U	U	U	U	U	U	U	U	U	U	U	U	D	U	U	U
Stratiotes	aloides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Striga	spp.	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Taeniatherum	caput-medusae	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Tanacetum	vulgare	C	D	C	D	D	D	D	D	D	D	D	D	I	D	D	D
Torilis	arvensis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Tribulus	terrestris	C	C	C	D	D	C	D	D	D	D	C	D	D	D	D	D
Tridax	procumbens	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ulex	europaeus	C	U	C	D	D	U	D	D	D	D	U	D	D	D	D	D
Urochloa	panicoides	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Verbascum	thapsus	D	I	C	I	D	I	D	D	D	D	I	D	D	I	D	D
Xanthium	spinosum	C	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D
Zygophyllum	fabago	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

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Abutilon	theophrasti	U	U	U	U	C	D
Aegilops	cylindrica	U	U	U	U	C	U
Aeginetia	spp.	U	U	U	U	U	U
Ageratina	adenophora	U	U	U	U	U	U
Agropyron	repens	C	C	D	C	C	D
Alectra	spp.	U	U	U	U	U	U
Alhagi	pseudalhagi	U	U	U	U	U	U
Alopecurus	myosuroides	U	U	U	U	U	U
Alternanthera	sessilis	U	U	U	U	U	U
Ambrosia	tomentosa	U	U	U	U	U	U
Anchusa	officinalis	U	U	U	U	C	U
Anthriscus	sylvestris	U	U	U	U	U	U
Arctium	minus	C	C	C	C	C	D
Artemisia	absinthium	D	D	D	U	C	D
Avena	sterilis	U	U	U	U	U	U
Azolla	pinnata	U	U	U	U	U	D
Borreria	alata	U	U	U	U	U	U
Bromus	tectorum	I	D	I	D	D	D
Bryonia	alba	C	C	C	C	C	D
Cardaria	draba	D	D	D	D	D	D
Cardaria	pubescens	D	D	D	D	D	D
Carduus	acantholdes	U	U	U	U	C	D
Carduus	nutans	D	D	D	U	D	D
Carduus	pycnocephalus	U	U	U	U	U	U
Carduus	tenuiflorus	U	U	U	U	U	U
Carthamus	baeticus	U	U	U	U	U	U
Carthamus	lanatus	U	U	U	U	U	U
Carthamus	leucocaulos	U	U	U	U	U	U
Carthamus	oxycantha	U	U	U	U	U	U
Cenchrus	longispinus	U	U	U	U	C	D
Centaurea	calcitrapa	U	U	U	U	U	U
Centaurea	diffusa	D	D	D	D	C	D
Centaurea	iberica	U	U	U	U	U	U
Centaurea	juncea	U	U	U	U	U	U
Centaurea	juncea x nigra	U	U	U	U	C	U
Centaurea	macrocephala	U	U	U	U	U	U
Centaurea	maculosa	D	D	D	U	C	D
Centaurea	nigra	U	U	U	U	C	U
Centaurea	nigrescens	U	U	U	U	U	U
Centaurea	pratensis	D	D	D	U	C	D
Centaurea	repens	U	D	D	U	D	D
Centaurea	solstitialis	D	D	D	D	C	D

Genus	Species	SRM104	SRM322C	SRM402C	SRM406C	SRM414C	SRM421C
Centaurea	virgata	D	D	D	D	D	D
Chaenorrhinum	minus	U	U	U	U	U	U
Chondrilla	juncea	U	U	D	U	C	D
Chrysanthemum	leucanthemum	U	U	U	U	C	D
Chrysopogon	aciculatus	U	U	U	U	U	U
Cirsium	arvense	D	D	D	D	D	D
Cirsium	vulgare	D	D	D	D	D	D
Commelina	benghalensis	U	U	U	U	U	U
Conium	maculatum	C	C	C	C	C	D
Convolvulus	arvensis	D	D	D	D	C	D
Crupina	vulgaris	D	D	C	C	C	D
Cuscuta	approximata	U	U	U	U	C	D
Cuscuta	spp.	U	U	U	U	C	U
Cynoglossum	officinale	D	D	I	D	C	D
Cyperus	esculentus	U	U	U	U	C	U
Cytisus	monspessulanus	U	U	U	U	U	U
Cytisus	scoparius	C	C	C	C	C	D
Daucus	carota	C	C	C	C	C	D
Digitaria	abyssinica	U	U	U	U	U	U
Digitaria	scalarum	U	U	U	U	U	U
Digitaria	velutina	U	U	U	U	U	U
Drymaria	arenarioides	U	U	U	U	U	U
Echium	vulgare	U	U	U	U	C	U
Egeria	densa	C	C	C	C	C	D
Eichhornia	azurea	U	U	U	U	U	D
Emex	australis	U	U	U	U	U	U
Emex	spinosa	U	U	U	U	U	U
Equisetum	arvense	C	C	C	C	C	D
Equisetum	telmateia	C	C	C	C	C	D
Eruca	sativa	U	U	U	U	U	U
Eupatorium	adenophorum	U	U	U	U	U	U
Euphorbia	dentata	U	U	U	U	U	U
Euphorbia	esula	D	D	D	D	D	D
Euphorbia	prunifolia	U	U	U	U	U	U
Galega	officinalis	U	U	U	U	U	U
Gypsophila	paniculata	U	U	U	U	C	U
Halogeton	glomeratus	D	D	D	D	I	D
Helianthus	ciliaris	U	U	U	U	U	U
Hemizonia	pungens	U	U	U	U	D	D
Heracleum	mantegazzianum	U	U	U	U	U	U
Hibiscus	trionum	U	U	U	U	C	U
Hieracium	aurantiacum	C	C	C	C	C	D

Current Veg SRM Cover Types

Genus	Species	SRM104	SRM322C	SRM402C	SRM406C	SRM414C	SRM421C
Hieracium	pilosella	U	U	U	U	U	U
Hieracium	pratense	C	C	C	C	C	D
Hydrilla	verticulata	C	C	C	C	C	D
Hygrophila	polysperma	U	U	U	U	U	U
Hyoscyamus	niger	D	D	I	D	C	D
Hypericum	perforatum	D	D	D	D	C	D
Hypochaeris	radicata	C	C	C	C	C	D
Imperata	brasiliensis	U	U	U	U	U	U
Imperata	cylindrica	U	U	U	U	U	U
Ipomoea	aquatica	U	U	U	U	U	U
Ipomoea	triloba	U	U	U	U	U	U
Isatis	tinctoria	D	D	I	I	C	I
Ischaemum	rugosum	U	U	U	U	U	U
Kochia	scoparia	C	C	D	C	D	D
Lagarosiphon	major	C	C	C	C	C	D
Lamium	hybridum	U	U	U	U	U	U
Lepidium	latifolium	D	D	D	D	D	D
Leptochloa	chinensis	U	U	U	U	U	U
Lepyrodiclis	holosteoides	U	U	U	U	U	U
Limnophila	sessiliflora	U	U	U	U	U	D
Linaria	dalmatica	D	D	D	D	C	D
Linaria	vulgaris	D	D	D	U	C	D
Lychnis	alba	C	C	D	C	C	D
Lycium	ferocissimum	U	U	U	U	U	U
Lysimachia	vulgaris	U	U	U	U	U	U
Lythrum	salicaria	C	C	C	C	C	D
Lythrum	virgatum	U	U	U	U	U	U
Matricaria	maritima	C	C	C	C	C	D
Melastoma	malabathricum	U	U	U	U	U	U
Mikania	cordata	U	U	U	U	U	U
Mikania	micrantha	U	U	U	U	U	U
Milium	vernale	U	U	U	U	U	U
Mimosa	invisa	U	U	U	U	U	U
Mimosa	pigra	U	U	U	U	U	U
Mirabilis	nyctaginea	U	U	U	U	C	U
Monochoria	hastata	U	U	U	U	U	D
Monochoria	vaginalis	U	U	U	U	U	D
Myriophyllum	brasiliense	C	C	C	C	C	D
Myriophyllum	spicatum	C	C	C	C	C	D
Nardus	stricta	U	U	U	U	U	U
Nassella	trichotoma	U	U	U	U	U	U
Onopordum	acanthium	U	U	D	U	C	D

Genus	Species	SRM104	SRM322C	SRM402C	SRM406C	SRM414C	SRM421C
Opuntia	aurantiaca	D	D	D	D	U	U
Orobanche	spp.	U	U	D	D	U	D
Oryza	longistaminata	U	U	U	U	U	U
Oryza	punctata	U	U	U	U	U	U
Oryza	rufipogon	U	U	U	U	U	U
Ottelia	alismoides	C	C	C	C	C	D
Panicum	miliaceum	U	U	U	U	C	D
Paspalum	scrobiculatum	U	U	U	U	U	U
Peganum	harmala	U	U	U	U	U	U
Pennisetum	clandestinum	U	U	U	U	U	U
Pennisetum	macrourum	U	U	U	U	U	U
Pennisetum	pedicellatum	U	U	U	U	U	U
Picris	hieracoides	U	U	U	U	U	U
Polygonum	cuspidatum	C	C	C	C	C	D
Potentilla	recta	D	D	D	U	C	D
Proboscidea	louisianica	U	U	U	U	U	U
Prosopis	alapataco	U	U	U	U	U	U
Prosopis	argentina	U	U	U	U	U	U
Prosopis	articulata	U	U	U	U	U	U
Prosopis	burkartii	U	U	U	U	U	U
Prosopis	caldenia	U	U	U	U	U	U
Prosopis	calingastana	U	U	U	U	U	U
Prosopis	campestris	U	U	U	U	U	U
Prosopis	castellanosii	U	U	U	U	U	U
Prosopis	denudans	U	U	U	U	U	U
Prosopis	elata	U	U	U	U	U	U
Prosopis	farcta	U	U	U	U	U	U
Prosopis	ferox	U	U	U	U	U	U
Prosopis	fiebrigii	U	U	U	U	U	U
Prosopis	hassleri	U	U	U	U	U	U
Prosopis	humilis	U	U	U	U	U	U
Prosopis	kuntzei	U	U	U	U	U	U
Prosopis	pallida	U	U	U	U	U	U
Prosopis	palmeri	U	U	U	U	U	U
Prosopis	reptans	U	U	U	U	U	U
Prosopis	rojasiana	U	U	U	U	U	U
Prosopis	ruizlealii	U	U	U	U	U	U
Prosopis	ruscifolia	U	U	U	U	U	U
Prosopis	sericantha	U	U	U	U	U	U
Prosopis	strombulifera	U	U	U	U	U	U
Prosopis	torquata	U	U	U	U	U	U
Rorippa	austriaca	U	U	U	U	U	U

Current Veg SRM Cover Types

Genus	Species	SRM104	SRM322C	SRM402C	SRM406C	SRM414C	SRM421C
Rorippa	sylvestris	C	C	C	C	C	D
Rottboellia	cochinchinensis	U	U	U	U	U	U
Rottboellia	exaltata	U	U	U	U	U	U
Rubus	fruticosus	U	U	U	U	U	D
Rubus	moluccanus	U	U	U	U	U	D
Sagittaria	sagittifolia	C	C	C	C	C	D
Salsola	vermiculata	U	U	U	U	D	U
Salvia	aethiopis	U	U	U	U	U	U
Salvinia	auriculata	U	U	U	U	U	U
Salvinia	biloba	U	U	U	U	U	U
Salvinia	herzogii	U	U	U	U	U	U
Salvinia	molesta	U	U	U	U	U	U
Secale	cereale	D	D	D	D	C	D
Senecio	jacobaea	C	C	C	C	C	D
Setaria	pallide-fusca	U	U	U	U	C	U
Silybum	marianum	U	U	U	U	C	U
Solanum	dulcamara	C	C	D	C	C	D
Solanum	elaeagnifolium	U	U	U	U	C	U
Solanum	rostratum	C	C	C	C	C	D
Solanum	torvum	U	U	U	U	C	U
Sonchus	arvensis	D	D	D	D	C	D
Sorghum	halepense	D	D	D	D	D	D
Sparganium	erectum	U	U	U	U	U	U
Spartina	alterniflora	U	U	U	U	U	U
Spartina	anglica	U	U	U	U	U	U
Sphaerophysa	salsula	U	U	U	U	D	D
Stratiotes	aloides	C	C	C	C	C	U
Striga	spp.	U	U	U	U	C	U
Taeniatherum	caput-medusae	D	D	D	D	C	D
Tanacetum	vulgare	C	C	C	C	C	D
Torilis	arvensis	U	U	U	U	C	U
Tribulus	terrestris	D	D	D	D	C	D
Tridax	procumbens	U	U	U	U	C	U
Ulex	europaeus	U	U	U	U	C	D
Urochloa	panicoides	U	U	U	U	C	U
Verbascum	thapsus	D	D	D	D	C	D
Xanthium	spinosum	C	C	C	C	C	D
Zygophyllum	fabago	U	U	U	U	U	U

Genus	Species	SRM 101	SRM 102	SRM 103	SRM 105	SRM 106	SRM 107	SRM 108	SRM 302	SRM 304	SRM 306	SRM 307	SRM 308	SRM 311	SRM 312	SRM 313	SRM 314	SRM 315	SRM 316	SRM 317	SRM 318	SRM 319
Bromus	tectorum	I	I	D	I	D	D	D	I	I	I	D	D	I	I	D	I	I	I	I	I	I
Cardaria	draba	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D
Cardaria	pubescens	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D	D
Carduus	nulans	D	I	D	D	U	D	D	D	I	I	I	D	I	I	D	D	D	D	D	D	D
Centaurea	diffusa	D	D	C	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Centaurea	maculosa	D	I	C	D	D	D	C	D	I	I	D	D	I	I	D	D	D	D	D	D	D
Centaurea	repens	D	D	C	U	D	U	C	D	D	D	D	D	D	D	D	D	U	U	U	U	U
Centaurea	solstitialis	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Centaurea	virgata	D	D	C	D	D	D	C	D	D	D	D	C	D	D	C	D	D	D	D	D	D
Chondrilla	juncea	D	D	C	U	U	D	C	D	D	D	D	C	D	D	C	D	D	D	U	U	U
Chrysanthemum	leucanthemum	D	D	D	U	U	U	D	D	D	D	D	D	D	D	D	U	U	U	U	U	U
Cirsium	arvense	D	I	D	D	D	D	I	D	I	I	D	I	I	I	I	D	D	D	D	D	D
Cirsium	vulgare	D	I	D	D	D	D	D	D	I	I	I	D	I	I	D	D	D	D	D	D	D
Crupina	vulgaris	D	D	C	D	C	C	C	D	D	D	D	C	D	D	C	C	C	C	D	D	D
Euphorbia	esula	D	I	C	D	D	D	C	D	I	I	D	D	I	I	D	D	D	D	D	D	D
Halogeton	glomeratus	D	D	C	D	D	D	C	D	D	D	D	C	D	D	C	D	D	D	D	D	D
Hieracium	aurantiacum	C	C	C	C	C	C	C	C	C	C	D	D	C	C	I	C	C	C	C	C	C
Hieracium	pratense	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Isatis	tinctoria	I	D	C	D	I	D	C	I	I	I	I	C	I	I	C	I	I	I	D	D	D
Linaria	dalmatica	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Linaria	vulgaris	D	D	D	D	U	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Lythrum	salicaria	C	C	C	C	C	C	C	C	C	C	D	D	C	C	D	C	C	C	C	C	C
Onopordum	acanthium	D	D	C	U	U	U	C	D	D	D	D	C	D	D	C	D	D	D	U	U	U
Potentilla	recta	I	I	D	D	U	U	D	I	I	I	I	I	I	I	I	D	D	D	D	D	D
Salvia	aethiopis	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Sonchus	arvensis	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Taeniatherum	caput-medusae	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D

* SRM Cover Types for Potential Veg analyses were determined for these 27 priority weeds

SRM (322P-614) Cover Types Included in Potential Veg

Genus	Species	SRM 322P	SRM 324	SRM 401	SRM 402P	SRM 403	SRM 404	SRM 405	SRM 406P	SRM 407	SRM 408	SRM 410	SRM 411	SRM 412	SRM 414P	SRM 415	SRM 419	SRM 420	SRM 421P	SRM 422	SRM 614
Bromus	tectorum	D	D	D	I	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D
Cardaria	draba	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D
Cardaria	pubescens	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D
Carduus	nutans	D	D	U	D	U	D	U	U	U	U	C	D	D	D	D	D	D	D	I	D
Centaurea	diffusa	D	D	D	D	D	D	D	D	D	D	C	D	D	C	D	D	D	D	D	D
Centaurea	maculosa	D	D	U	D	U	U	U	U	U	D	D	D	D	C	D	D	D	D	D	D
Centaurea	repens	D	U	U	D	U	U	U	U	U	U	C	D	U	D	D	D	D	D	D	D
Centaurea	solstitialis	D	D	D	D	D	D	D	D	D	D	C	D	D	C	D	D	D	D	D	D
Centaurea	virgata	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	I
Chondrilla	juncea	U	D	D	D	D	D	U	U	U	U	C	D	U	C	U	D	D	D	C	D
Chrysanthemum	leucanthemum	U	U	U	U	U	U	U	U	U	U	C	D	U	C	U	D	D	D	D	D
Cirsium	arvense	D	D	D	D	D	D	D	D	D	D	D	I	D	D	D	D	D	D	I	D
Cirsium	vulgare	D	D	D	D	D	D	D	D	D	D	D	D	C	U	D	D	D	D	I	D
Crupina	vulgaris	D	C	C	C	C	C	C	C	C	C	C	C	D	C	D	D	D	D	D	D
Euphorbia	esula	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	I	D
Halogeton	glomeratus	D	D	D	D	D	D	D	D	D	D	C	D	D	I	D	D	D	D	C	D
Hieracium	aurantiacum	C	C	C	C	C	C	C	C	C	C	D	D	C	C	C	D	D	D	D	C
Hieracium	pratense	C	C	C	C	C	C	C	C	C	C	C	D	C	C	C	D	D	D	D	C
Isatis	tinctoria	D	I	I	I	I	I	I	I	I	I	C	D	D	C	D	I	I	I	D	I
Linaria	dalmatica	D	D	D	D	D	D	U	U	U	D	C	D	D	C	D	D	D	D	D	D
Linaria	vulgaris	D	D	D	D	D	D	C	C	C	D	C	D	U	C	D	D	D	D	D	D
Lythrum	salicaria	C	C	C	C	C	D	U	U	U	D	C	D	C	C	C	D	D	D	I	D
Onopordum	acanthium	U	D	D	D	D	D	U	U	U	D	C	U	U	C	U	D	D	D	D	C
Potentilla	recta	D	D	U	D	U	U	U	U	U	U	C	D	U	C	D	D	D	D	D	D
Salvia	aethiopis	U	U	U	U	U	U	U	U	U	U	C	D	U	C	U	D	D	D	D	D
Sonchus	arvensis	D	D	D	D	D	D	D	D	D	D	C	D	D	C	D	D	D	D	D	D
Taeniatherum	caput-medusae	D	D	D	D	D	D	D	D	D	D	C	D	D	C	D	D	D	D	D	D

* SRM Cover Types for Potential Veg analyses were determined for these 27 priority weeds