

Introduction

The Mimbres and Gila valleys provided oases and fertile lands in an arid region. While extensive irrigation systems were constructed to grow maize, squash, and beans, native plants were important to supplement diets and provide medicine. Native plants also provided materials for building, baskets, and clothing.



The **Gila River** is a tributary of the Colorado River. The fertile soils of its floodplain make the region inviting for agriculture.



The **Mimbres River** is a closed-basin river. Its waters are sourced from mountain run-off. The valley floor is a vast riparian floodplain of arid and semiarid land.



Research Overview

The purpose of this study was to examine evidences of interactions between humans and native plants during the Classic Mimbres (AD 1000-1130) and Cliff Phase (AD 1300-1450). Variations in floral finds between the two time periods provide insight into potential resource availability.

To achieve this goal, an examination of previously published findings was undertaken. Along with examining reports of macrobotanic, microbotanic, and pollen evidence, consideration of pottery was also included.

Finally, a review of O'odham traditional uses of native plants was incorporated, to provide an understanding of how the reported plant families might have been used by Salado and Mogollon area residents.

PLANT SPECIES AND THEIR USES IN MIMBRES AND SALADO SITES **IN SOUTHWEST NEW MEXICO Kiley Rose Stoj**

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Conclusion

Comparison between these two locations and time periods revealed that there were differences in plant material identified. These results may suggest differences in availability or cultural usage of native plants.





Boraginaceae-Borage seeds are difficult to harvest, but high in oil. The leaves can be eaten or used medicinally.

PLANTS COMMON TO ALL SITES











Solonaceae-Daturua has hallucinogenic and toxic properties. Depicted in Mimbres style pottery, seeds have been found in dwellings.



Salaceaewillow is common in riparian habitats; it is used to make baskets, and as medicine or tea.



Asteraceae-Wild Sunflower provided seeds and roots as food. The pith was used like chewing gum, and the pitch could be used like a putty.

PLANTS SEPARATED BY VALLEY

Upper Gila River Valley



Asteraceae-Cocklebur- seeds of the cocklebur were ground and made into cakes.



Martyniaceae-Devil's Claw pods were used in basket making; they provide black fiber. Secondarily, they were used as a food.



Mimbres River Valley





Laminaceae-Mint has medicinal properties. It is used especially for indigestion.

Papaveraceae-Prickly poppy has properties similar to opioid poppies, and may have been used as a sedative or analgesic.





Results

This study found data from three Gila River sites (Ormand, Woodrow, Gila Cliff Dwellings) and two Mimbres River sites (NAN, Harris) to examine recorded plant evidence.

Forty families of plants were identified in at least one of the five sites reviewed.

PLANT REMAINS		ARCHAEOLOGY SITES BY LOCATION AND TIME				
			Gila River Valley Sites		Mimbres River Valley Sites	
		Ormand Site	Woodrow Site	Cliff Dwelling Site	NAN Ranch Site	Harris Site
Family	Genus and/or Common Name	1300- 1450; Cliff Phase	900-1100 Classic Mimbres	1300-1450 Cliff Phase	850-1100 Classic Mimbres	550-1000 Classic Mimbres
Aizoaceae	Trianthema (g); False purslane		х		x	х
Amaranthaceae	Amaranthus(g); pigweed	f			x	х
Amaranthaceae	Chenopodium(g): goosefoot	f			x	m
Anacardiaceae	Rhus (g): sumac		x			
Asparagaceae	Agave (g): Yucca (g)		x	m-s.l	×	<u> </u>
Asteraceae	Xanthium (g): cockleburr		x		~	9
Asteraceae/Compositae	Helianthus (g): sunflower	f	x	x	x	x-m
Boraginaceae	Borage	f-s	~	 	~	×
Brassicaceae	Descurginia (g): Tansy mustard	13			v	
Brassicaceae	Gromwoll			~	~ 	
Castaceae	Opuntia (g): challa: Drickly poor		Y	X	X	E A p
Cactaceae	<i>Comparting</i> (g); choild; Prickly pear		X		X	FΑ, p
Cactaceae	Coryphantha(g); Beenive cactus				X	
Cactaceae	Attain loss (a), and the sale			m-s,i	X	X
Chenopodiaceae	Altriplex (g); saltbush	6	X		X	X
Cneno-am	Unable to differentiate (similar polien)	T-C				р
Cucurbitaceae	Squash, pumpkin, wild melon	t-c,s		X		
Cupressaceae	Juniperus (g); juniper	m-w		5,1	X	p,m
Solanaceae	Datura (g): Jimsonweed			X	X	
Euphorbiaceae	Euphorbia (g); Spurge	f				
Fabaceae	Acacia	x			X	
Fabaceae	Prosopis (g); Mesquite				x	FA
Fagaceae	Quercus (g); Oak	m		Х	х	х
Gramineae	Grasses	f-c		х		р
Juglandaceae	Juglans (g); Walnut		x	х		х
Lamiaceae	Labiatae (g); Mint					х
Leguminoseae	Wild bean			Х		
Loaceae	Mentelia (g); Stickleaf		х		х	
Malvaceae	mallow					р
Martyniaceae	Devils claw			Х		
Molluginaceae	Mollugo (g); carpetweed				х	
Nyctaginaceae	Four oclock			х		
Onagraceae	<i>Oentothera</i> (g); Primrose	f				
Papaveraceae	Argemone (g); Prickly poppy				х	
Pinaceae	Pinus (g); pine	m		x-s,w,l	х	P,m
Plantaginaceae	Plantago (g); Plantain					х
Poaceae	Phragmites (g); Common reed					х
Poaceae; (Gramineae)	grasses				х	
Polygonaceae	Polygonum (g); Smartweed					х
Portulacaceae	Portulaca (g); Purslane	f-c	х		х	х
Rosaceae	Choke cherry			Х		
Salicaceae	Populgus (g); cottonwood	m-w				
Salicaceae	Salix (g); willow	m-w			x	
Sapindaceae	Acer (g); maple					р
Solanaceae	Physalis (g); Ground cherry					x
Talinaceae ^t	Talium (g); Flame flower	x				
Ulmaceae	hackberry					q
Verbenaceae	Verbena (g) Vervain					X
Vitaceae	Grape		x		×	m
Key to chart symbols: x-	plant reported/m- macronotanic find/w-	wood (constru	uction. firewood)/ c	- charred/ I- leaves	or fibers/ s- see	d or fruit/ n-
pollen/ h- found in association with human remains/ FA- molecular evidence (fatty acid)						

Temporally, 16 families were exclusive to Classic Mimbres sites, and 8 were only found at Cliff Phase sites.

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