**UCB Paleoethnobotany Lab Report #65 (INCOMPLETE—pending context info)**
**Analysis of Select Macrobotanical Remains from PACVIC, El Salvador**
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## Introduction:

This report summarizes the results of the macrobotanical analysis of selected classes of materials, recovered from excavations undertaken by the PACVIC, in the Gulf of Fonseca, El Salvador. The specimens analyzed include judgmental samples taken from various loci during excavations carried out during the 2006 field season, and marked as a particular class of (likely) macrobotanical material. Reported below are the findings from those specimens marked carbon (*carbon),* unknown *(desconocido),* wood *(madera)*, unclassified *(sin clasificar)*, seeds *(semillas)*, bajareque *(bajareque)*, unidentifiable *(no identificable),* and vegetation *(vegetal).*

Bulk sediment samples were also recovered from the excavation units and floated during the field season. However, the floated Light and Heavy Fractions from these sediment samples were not sorted at this time, due to reasons detailed further on in this report.

Only a few botanical taxa were recovered in this analysis, and many of these could not be identified due to the generally poor state of preservation. All sorted materials were classified into general categories of Wood, Lumps (mostly parenchymous tissue), Seeds, Other, Other Charred, Mineral, Modern Botanical, Shell, Snail, and Unidentifiable. Botanical taxa in the *Arecaceae, Poaceae, Cactaceae,* and *Fabaceae* families were tentatively identified at the family, genus, or species level.

The following pages summarize the field methods, laboratory methods, results, and conclusions of the preliminary macrobotanical analysis.

## Methods:

*Field methods:*

Excavations at each locus proceeded according to the standard methodology employed by PACVIC, and were conducted under the direction of Project Director Esteban Gomez. Sediment samples were taken from excavated loci and bagged. The volume of each of these sediment samples varied from [**4.0 to 6.0 liters]**.

**[After excavations, the bulk sediment samples were floated in a modified SMAP machine during the 2006 field season, under the direction of Esteban Gomez. In the course of this process, each sample was divided into Light and Heavy Fractions. A Flotation Log was maintained for this procedure. After flotation, each sample was thoroughly dried, then labeled and inserted into a plastic bag. The bags were labeled with provenance information and the contents (Heavy Fraction or Light Fraction). The Light and Heavy Fractions were eventually removed to the University of California at Berkeley Paleoethnobotany Lab.]**

Other materials recovered in the course of excavations and screening were bagged separately (for the future, strongly discouraged in cases where loci will also undergo flotation procedures, as this divides the information into two irreconcilable categories).

These materials were labeled as carbon (*carbon),* unknown *(desconocido),* wood *(madera)*, unclassified *(sin clasificar)*, seeds *(semillas)*, bajareque *(bajareque)*, unidentifiable *(no identificable),* and vegetation *(vegetal)*. All 61 bags of these materials were re-sorted into revised material classes within the laboratory.

*Laboratory methods:*

The selected materials were sorted under a low-power boom-mounted reflected light stereo microscope, with a fiber optic illuminator. Only charred botanical remains were considered to be archaeological, and these carbonized materials were removed and classified as Wood, Lumps (mostly parenchymous tissue), Seeds, Unknown, Unidentifiable, or Other. Non-archaeological or botanical materials such as snails, bone, modern macrobotanical materials, ceramic, shell, other non-botanical charred materials, and other miscellaneous materials were also removed and labeled. Once removed, the materials were further divided into similar subclasses, where possible. Wood, Lumps, Seeds and other botanical materials were then identified to the most specific possible taxonomic classification.

All materials, botanical and non-botanical, were counted and recorded on the specimen data spreadsheet. Recorded as well were comments regarding the condition and contents of the sample as a whole, and particular items within the sample. Each class of materials was then placed in a gelcap or plastic jewel box, containing a label with the class and sample number. The combined re-labeled specimens were replaced in the original labeled specimen bag. The data from the judgmental samples was collated and transferred to an Excel spreadsheet.

**Results:**

The sediment samples contained seeds, wood, lumps, and various other non-botanical remains. The identification of various taxa proved difficult due to the poor preservation of the materials and in many cases the lack of identifiable morphology or surface features. However, taxa in the *Arecaceae, Poaceae,* and *Fabaceae* families were tentatively identified to the family, genus, or species level. No charts have been generated to compare the numbers or presence/absence of particular taxa. This is because the taxa were judgmentally removed from the sample, and not systematically collected in such a way that would allow for comparison between loci. However, the bulk sediment samples can be compared, once re-floated, by total numbers of recovered items, total numbers of each taxon recovered, total item recovery rates by locus, comparison of loci by recovery rates (counts and weights), ubiquity of various taxa (calculated through presence/absence at each locus), weight and counts of archaeobotanical classes by locus, and the total percentage of wood, lumps, seeds, and other charred botanical items recovered, as a percentage of the combined archaeobotanical assemblage.

All of the surviving botanical materials appear to have been charred at medium-high temperatures in dry contexts, as they are fairly uniformly carbonized and have fairly clear morphology where the surfaces have not been distorted or eroded. Many were highly fragmented, although some samples contained larger fragments of wood, likely

indicating less bioturbation and mechanical transformation after deposit. In some cases, these may even indicate secondary versus tertiary or quaternary deposits.

**Analysis:**

*Taxa information:*

What follows is a summary of the archaeobotanical taxa recovered. Included in each taxon summary is its corresponding family with typical representatives, broad range of taxon growth, known modern economic uses for the smallest identified subset, archaeological sites where the taxon has been recovered, areas where the taxon is found, select literature where the taxon is referenced, and specific loci where the taxon has been recovered from PACVIC judgmental samples.

It should be noted that all modern seeds recovered from the judgmental samples have no known economic uses. It is unlikely that any uncharred seeds would have preserved. However, should any have survived attack by microbes, they were not likely to have been utilized, and were probably adventitious species or weeds.

1. *Arecaceae* endocarp fragments.
Palm family.
Found throughout Mexico and Central America.
Recorded uses for various species within *Arecaceae* include food (edible endosperm and oil extraction), construction (leaves used in thatching), medicine, and beverage.
Archaeologically recovered from Actun Nak Beh (endocarps) (Morehart 2002); Wild Cane Cay (seed), Pelican One Pot, and Tiger Mound (seed) (McKillop 1994 &2002); and Pulltrouser (seed) (Miksicek 1983); among other sites where *Arecaceae* taxa were identified only to the family level.
Referenced in Fouqué, 1972; Henderson et al., 1995; Villachica et al., 1996; Roys 1931; Tozzer 1941; Alcorn 1984; Rico-Gray 1991; Morehart 2002; Lentz 2001; McKillop 1994; Miksicek 1983; McKillop 2002; and Sutherland 1986.
Various *Arecaceae* species can be found in the wild, and are also commonly grown in house gardens.
Recovered from loci 1-A-3 and 2-B-10.

2. cf. *Cactaceae* wood charcoal fragments.
Cactus family.
Found throughout Mesoamerica.
Recorded uses for various species within *Cactaceae* include food (edible fresh and dried fruits) and medicine.
Archaeologically recovered from Actun Nak Beh (wood charcoal) (Morehart 2002); Rancho Ires (seed) (Morell-Hart); Cerro Palenque (seed) (Morell-Hart); and Curruste (seed) (Morell-Hart).
Referenced in Sutherland 1986 and Casas and Barbera 2002.
Economic species of cacti are commonly grown in house gardens. Many species are also found wild throughout Mesoamerica.
Recovered (potentially) from locus 1-A-20.

3. cf. *Enterolobium cyclocarpum* (guanacaste) testa fragments.

*Fabaceae (*bean) family.
Found throughout Mesoamerica.
Recorded uses for *Enterolobium* include wood (canoes and paneling); dried fruit (ground to produce soap); medicine; fodder; fuel; apiculture; toys; tools for the home; and food (seeds toasted and ground, similarly to squash seeds).
No known previous archaeological recovery.
Referenced in Atran 1993, Rico-Gray 1991, and Morell-Hart (personal observation 2005).
*Enterolobium cyclocarpum* is found wild, in a wide variety of ecological conditions, and is also commonly found in fallow fields and home gardens.
Recovered (potentially) from locus 2-A-9.

4. cf. *Zea mays* (maize) kernel fragment.
*Poaceae* (grass)family.
Found throughout the Americas.
Recorded uses for *Zea* include edible kernel (for tortilla, tamal, atole, horneado (pib'il)); feed for pigs, dogs, and chickens; and cooking wrapper.
Archaeologically recovered from Actun Chapat (maize frags) (Morehart 2002), Actun Chechem Ha (cobs and kernel and starch grains) (Morehart 2002), Barton Creek Cave (cobs, kernels, stems, husks) (Morehart 2002); Cueva de las Pinturas (Lentz 1991); Naj Tunich (Lentz 1991); Mayahak Cab Pek (cobs) (Lentz 1991); Copan (cupule, kernel) (Lentz 1991); and Wild Cane Cay (McKillop 2002).
Referenced in Morehart 2002; Goldstein 1999; Lentz 1991; Lentz 2001; McKillop 2002 Atran 1993; Brady 1997; Brady 1989; Brady 1995; Doebley 1990…. and many, many others.
*Zea mays* is a fully domesticated species, grown either in fields or homegardens.
Recovered (potentially) from locus 2-A-3.

5. UNKN pericarp fragments: various unknown species.
These appear to be predominantly weedy non-domesticate species. They may have been used in everything from medicine to animal fodder to fuel, but do not match any seeds currently contained in the UCB reference collection. They have been numbered to differentiate between apparently distinct species. (e.g.: UNKN 1, UNKN 25, etc.)
Recovered from 1-A-20.

6. UNKN nutshell fragments: various unknown species.
These appear to be predominantly weedy non-domesticate species. They may have been used in everything from medicine to animal fodder to fuel, but do not match any seeds currently contained in the UCB reference collection. They have been numbered to differentiate between apparently distinct species. (e.g.: UNKN 1, UNKN 25, etc.)
Recovered from 2-A-9.

7. Lumps: various unknown species
These are large lumps of parenchymous root or tuber tissue, or stem storage tissue. They may be from *Manioc esculenta* (manioc), *Ipomoea batatas* (sweet potato), seeds, or other

starchy storage tissue, but remain unidentified at this time. However, based on small bits of tissue morphology alone, at least 3 species are here represented.
Recovered from loci 1-A-11, 1-A-19, 1-A-3, 1-A-4, 1-A-6, 2-A-3, 2-C-6, and 3-A-4.

8. Wood: various unknown species
These are charred wood fragments. They may be from a large variety of wood species, or a narrow range of species, but remain unidentified at this time, aside from the tentative *Cactaceae* wood identification. At least 4 species are here represented, mostly tropical woods.
Recovered from loci 1-A-10, 1-A-1, 1-A-12, 1-A-16, 1-A-19, 1-A-2, 1-A-20, 1-A-3, 1-A-4, 1-A-6, 2-A-13, 2-A-3, 2-A-6, 2-A-9, 2-B-10, 2-B-13, 2-C-3, 2-C-6, 3-A-2, 3-A-3, 3-A-4, and 3-A-6.

*Contextual information:*

This section details the recovered remains, by context. Summarized are the notes about each context, and the taxa recovered from within each locus, where identified.

**1-A-10:** Archaobotanical material included small wood fragments. Other materials included partially and fully charred bone fragments.

**1-A-11:** Archaeobotanical material included small and medium wood fragments, and lumps. Other materials included bone fragments (including a possible ray jaw), and a possible sea urchin spine fragment.

**1-A-12:** Archaeobotanical material included small, medium, and large wood fragments. Other materials included bone fragments.

**1-A-16:** Archaeobotanical material included small and medium wood fragments and unknown tissue. Wood appears to be of a single species.

**1-A-19:** Archaeobotanical material included wood fragments and lumps. Lumps are very dense tissue. Other materials included bone fragments, and a tooth fragment.

**1-A-2:** Archaeobotanical material included three very large wood fragments. Other materials included a bivalve shell fragment.

**1-A-20:** Archaeobotanical material included wood fragments of at least 2 species, possibly including *Cactaceae*, unknown pericarp fragments. Other materials included bone or marine fragments, bone fragments, minerals, and snail shell.

**1-A-3:** Archaeobotanical material included included wood fragments of at least one species, a tropical fast-growth wood, lumps, 2 cf. *Arecaceae* endocarp fragments; and unknown plant tissue. Other materials included minerals and bone.

**1-A-4:** Archaeobotanical material included at least 2 species of wood, and lumps. Other materials included bone and minerals.

**1-A-6:** Archaeobotanical material included wood fragments and a lump. Other materials included bone and minerals.

**2-A-13:** Archaeobotanical material included only a few very small wood fragments.

**2-A-17:** Only bajareque noted in judgmental samples.

**2-A-2:** Only modern materials recovered.

**2-A-3:** Archaeobotanical material included a lump from a possibly cf. *Zea mays* kernel, wood fragments, and unknown charred material. Other materials included minerals.

**2-A-6:** Archaeobotanical material included wood fragments.

**2-A-9:** Archaeobotanical material included cf. *Enterolobium cyclocarpum* testa fragments, wood, and nutshell fragments. Other materials included minerals.

**2-B-10:** Archaeobotanical material included wood fragments, and a cf. *Arecaceae* endocarp fragment. Other materials included minerals and snail shell.

**2-B-13:** Archaeobotanical material included wood. Other materials included minerals and snail shell.

**2-B-4:** Only modern materials recovered.

**2-C-3:** Only modern materials recovered.

**2-C-6:** Archaeobotanical material included wood fragments and lumps.

**2-C-8:** No archaeobotanical material recovered. Burned earth clumps and modern seeds recovered.

**3-A-2:** Archaeobotanical material included wood and unknown plant tissue. Other materials included bone fragments and minerals.

**3-A-3:** Archaeobotanical material included wood fragments. Other materials included bone fragments and minerals.

**3-A-4:** Archaeobotanical material included wood and lumps. Other materials included 5 lumps of clay encasing >5 bones, including one jaw frag & a portion of a bivalve shell.

**3-A-6:** Archaeobotanical material included wood fragments. Other materials included bone fragments and many matrix clumps, some with flecks of wood/shell/bone.

**Conclusions:**

Although some economic taxa were recovered from the PACVIC judgmental samples, the exact uses of various botanical remains in many cases are difficult to ascertain. The recovered archaeobotanical materials indicate the use of several typical economic species, as well as several other species that may have been weeds, or also may have been used for various purposes. Although there are "unknown" species present in the assemblage, as these species are not currently known to have specific economic uses, it is likely that they simply served as tinder or fuel. A few general statements are here made about the particular taxa recovered.

Various palm (*Arecaceae)* species are recorded as being used for food, medicine, construction, roofing, beverage, and utensils. As *Arecaceae* species have been recovered from many other archaeological sites, have a multitude of recorded uses, and present an extremely durable endocarp, it is no surprise that fragments were recovered from the samples. Ssome species have an edible endosperm similar to coconut, leaves often used for thatching, and/or sap used in beverage-making. It is also not surprising that potential *Zea mays* material appeared in the archaeobotanical assemblage, as this is considered the staple crop of much of the Americas.

The potential cactus (*Cactaceae* sp.) wood is an interesting element of the assemblage. It is possible that the fruits of this cactus were consumed, and the desiccated stems burned. Or it may be possible that the wood itself was targeted, and collected from old cactus "skeletons" to be used as fuel. The potential guanacaste (*Enterolobium cyclocarpum)* testa (seed coat) fragment is another interesting element. The uses of the tree are various, including shade, food, and fuel. But as the testa alone was positively identified, it is likely that this portion, at least, was specifically utilized. As the testa is extremely durable (like nutshell), this taxon is more likely to be preserved than many other species.

Other species recovered from the PACVIC judgmental samples do not match known economic species of the greater Mesoamerica area. Although it is possible that these taxa served unknown ritual, medicinal, dietary, or other purposes, any assignation would be pure speculation. All other recovered "unknown" species remain unidentified at this time, and do not match examples in the botanical reference collection at UCB.

The absence of other known economic species is due almost entirely to sampling and preservation issues, but may also indicate different processing or cooking areas, different cooking methods, or different areas sampled. The systematically collected flotation samples should reveal a more whole picture of the ethnobotanical material at this site.

In terms of procurement, all four of the positively-identified taxa may have come from a house garden, milpa, or fallow milpa—the cactus *(Cactaceae)* wood fragments, the possible guanacaste seeds *(Enterolobium cyclocarpum),* the possible maize kernel tissue *(Zea mays),* and the palm (*Arecaceae*) fruit endocarp fragments. The presence of all these species suggests a concordance with ethnographically- and ethnohistorically-recorded common economic species. The rest of the "unknown" species, including wood and lumps, may have been obtained from almost any location, and either

opportunistically gathered or deliberately grown. Overall, the various taxa represented may represent the exploitation of a wide range of ecological niches.

The previous results suggest a few potential directions for future research. First, re-dividing field samples with the use of a microscope aids in better identifications of materials judgmentally collected, and is highly recommended for future work. This is especially recommended before samples are sent for carbon dating, and other specialist work (e.g. archaeozoology). Second, the current results would be much improved by an analysis of the recovered wood fragments by a specialist in this field, as the large quantities of wood recovered would likely have much to say about local ecology and use of tree species. Finally, a micro analysis of the starch grains, phytoliths, and/or oxalic crystals potentially present in the charred "lumps" could serve to elucidate the role of root species in the cuisine of the occupants of this site.

**Future Considerations:**

First, it is likely that those materials left unlabeled in the judgmental samples can be disposed of, as they are modern botanical remains and/or nonarchaeological minerals (such as naturally-occurring iron nodules).

Most importantly, however, the light fraction and heavy samples will need to be refloated together, as both fractions had an extremely heavy coating of clay. This resulted in light fraction materials (such as seeds) sinking into the heavy fraction materials, due to additional weight imparted by ionized clays, making them unrecoverable. It also produced two fractions of samples which are impossible to sort and identify, due to this clay coating. In the future, the flotation method in this area may be improved through the heavy use of a deflocculant such as sodium bicarbonate or hydrogen peroxide, or, in the case of materials with strong potential for dating, the deflocculant sodium hexametaphosphate.

| op-su-lo | Bag Classif | Total items | Seeds | Wood | Lumps | Bone | Snail | Modernbot | Mineral | Shell | Othercharred | Other | Sortcomments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-A-10 | carbon | 12 | | 6 | | 6 | | | | | | | small wood frags; some partially charred bones, some fully blackened |
| 1-A-11 | desconocido | 1 | | | | | | | | | | 1 | sea urchin spine frag? |
| 1-A-11 | carbon | 19 | | 6 | 2 | 11 | | | | | | | sm & med wood frags; bone frags may include ray jaw |
| 1-A-11 | carbon | 14 | | 8 | | 5 | | | 1 | | | | iron nodule; some bone frags only partially burned; small and med wood frags |
| 1-A-11 | madera | 4 | | | | | | 4 | | | | | modern wood frags |
| 1-A-12 | carbon | 23 | | 14 | | 5 | | | 4 | | | | sm and med wood frags; dirt clumps |
| 1-A-12 | carbon | 3 | | 3 | | | | | | | | | large wood frags |
| 1-A-12 | cabello | 1 | | | | | | | | | | 1 | hairs |
| 1-A-16 | carbon | 15 | | 10 | | 2 | | | 2 | | | 1 | 2 mineral nodules; 1 unknown tissue; wood appears to be 1 species |
| 1-A-19 | desconocido | 21 | | | | 17 | | 4 | | | | | modern roots, seeds, wood; bone is bird, mammal & marine-- 1 tooth, 1 vertebra, various longbones |
| 1-A-19 | carbon | 24 | | 15 | 1 | 3 | | | 4 | | | 1 | 4 minerals, 1 worm dung; wood at least 3 species; 1 tooth frag., lump is unidentifiable, dense tissue |
| 1-A-2 | desconocido | 1 | | | | 1 | | | | | | | one large long bone frag |
| 1-A-2 | madera | 1 | | | | | | 1 | | | | | modern wood, very large |
| 1-A-2 | madera | 3 | | 2 | | | | | | 1 | | | 2 enormous wood frags; 1 shell frag (bivalve) |
| 1-A-2 | madera | 1 | | | | | | 1 | | | | | 1 very large modern wood frag |
| 1-A-20 | sin clasificar | 3 | | | | 3 | | | | | | | bone or marine |
| 1-A-20 | carbon | 44 | | 18 | | 15 | | 1 | 8 | | 2 | | 1 modern wood, 8 clay & mineral nodules; wood is at least 2 species, one possibly Cactaceae; 2 unknown pericarp fragments, very eroded |
| 1-A-20 | semillas | 2 | | | | | | 2 | | | | | modern seeds |
| 1-A-3 | carbon | 104 | | 93 | 1 | 2 | | | 5 | | 3 | | iron nodule and dirt clumps; wood fragments are very large to small, at least one species represented, fast growth tropical; 2 cf. Arecaceae endocarp fragments; unknown plant tissue |
| 1-A-4 | carbon | 63 | | 56 | 3 | 2 | | | 2 | | | | wood frags are very large to small, at least 2 species represented; lumps are very dense tissue |
| 1-A-6 | carbon | 58 | | 41 | 1 | 5 | | | 11 | | | | mineral nodules; some very large wood frags |
| 2-A-13 | carbon | 4 | | 4 | | | | | | | | | very small wood frags |
| 2-A-17 | bajareque | 3 | | | | | | | | | | 3 | bajareque frags |
| 2-A-2 | madera | 1 | | | | | | 1 | | | | | modern wood, very large |
| 2-A-3 | semillas | 4 | | | 1 | | | 3 | | | | | modern seeds; lump MAY POSSIBLY be from a Zea mays kernel |
| 2-A-3 | carbon | 25 | | 11 | | | | | 13 | | 1 | | worm burrow plugs and burned dirt clumps; one unknown plant tissue; small to large wood frags include bark |
| 2-A-6 | carbon | 5 | | 5 | | | | | | | | | sm and med wood frags |
| 2-A-6 | semillas | 10 | | | | | | 1 | | | | 9 | 1 modern seed; insect eggs |
| 2-A-9 | carbon | 2 | 1 | 1 | | | | | | | | | sm wood frag; 1 cf. Enterolobium cyclocarpum testa (2% frag) |
| 2-A-9 | semillas | 3 | | | | | | | 2 | | | 1 | insect; clay nodules |
| 2-A-9 | desconocido | 1 | | | | | | 1 | | | | | modern wood/pith |
| 2-A-9 | carbon | 8 | | 7 | | | | | | | 1 | | 7 sm and med wood fragments; one nutshell fragment |
| 2-B-10 | carbon | 7 | | 4 | | | | | 2 | | | | clay lumps; small wood fragments; 1 cf. Arecaceae endocarp |
| 2-B-10 | carbon | 11 | | 7 | | | | | | | | 4 | small wood frags; 3 burned dirt and one unburned dirt clump |
| 2-B-10 | semillas | 8 | | | | | | 5 | | | | 3 | modern seeds and insects |
| 2-B-10 | semillas | 2 | | | | | | 1 | | | | 1 | modern seed & insect casing |
| 2-B-13 | semillas | 2 | | | | | | | 1 | | | 1 | insect; clay nodule |
| 2-B-13 | no identificable | 3 | | | | | | 3 | | | | | modern root & wood |
| 2-B-13 | carbon | 3 | | 3 | | | | | | | | | very small wood frags |
| 2-B-13 | carbon | 9 | | 2 | | | | | 7 | | | | 7 dirt clumps; small wood frags |
| 2-B-13 | vegetal | 2 | | | | | | | | | | 2 | worm burrow plugs |
| 2-B-13 | sin clasificar | 4 | | | | | | 2 | | | | 2 | modern bots & insects |
| 2-B-13 | vegetal | 2 | | | | | | | 1 | | | 1 | dirt clumps and insects |
| 2-B-4 | semillas | 3 | | | | | | 3 | | | | | modern seeds |
| 2-B-4 | desconocido | 4 | | | | | | 2 | | | | 2 | insect parts; earthworm leavings; modern seeds |
| 2-C-3 | carbon | 10 | | 6 | | | | 1 | 3 | | | | small and med wood frags-- fast growing tropical wood; 3 burned clay lumps |
| 2-C-3 | semillas | 5 | | | | | | 5 | | | | | modern seeds, leaf material, & wood |
| 2-C-6 | cabello | 2 | | | | | | | | | | 2 | hairs |
| 2-C-6 | carbon | 4 | | 4 | | | | | | | | | med wood frags |
| 2-C-6 | carbon | 5 | | 4 | 1 | | | | | | | | v. large wood frags; one lump |
| 2-C-6 | sin clasificar | 4 | | | | | | 4 | | | | | modern wood |
| 2-C-8 | sin clasificar | 4 | | | | | | 4 | | | | | modern seeds |
| 2-C-8 | carbon | 1 | | | | | | | 1 | | | | very dense burned earth with metal content? |
| 3-A-2 | carbon | 30 | | 26 | | 11 | | | 1 | | 1 | | dirt clumps and iron nodule; wood fragments are small and medium, representing at least two species; one unknown tissue frag |
| 3-A-3 | carbon | 19 | | 13 | | 5 | | | 1 | | | | 1 iron nodule; medium wood frag |
| 3-A-4 | desconocido | 5 | | | | | | | | | | 5 | 5 lumps of clay encasing >5 bones, including one jaw frag & a portion of a bivalve shell |
| 3-A-4 | carbon | 25 | | 12 | 4 | 9 | | 9 | | | | | modern wood & dirt clcumps; some very small bones; very small wood fragments |
| 3-A-6 | semillas | 1 | | | | | | 1 | | | | 1 | modern seed & insect casing |
| 3-A-6 | vegetal | 2 | | | | | | 2 | | | | | modern wood/pith |
| 3-A-6 | madera | 1 | | | | | | 1 | | | | | modern wood, very large |
| 3-A-6 | carbon + contexl | 11 | | 2 | | 4 | | | | | | 5 | semi-charred and fully charred bone frags; very small wood frags; many matrix clumps, some with flecks of wood/shell/bone |
| | | | | | | | | | | | | | |