1

Table 1: Macrofossils identified, including their family, common name, type and phytogeographic affinity.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Taxa | Family | Common name | Type | Phytogeographic affinity | |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Malvaceae | Malvaceae | – | – | – | |
|  | Chenopodiaceae | Chenopodiaceae | – | – | – | |
|  | Baccharis aff. tola | Asteraceae | Tola | Shrub | Puna | |
|  | Haploppapus sp. | Asteraceae | – | – | Desert | |
|  | Cryptantha sp. | Boraginaceae | Itallapa | Annual | Prepuna | |
|  | Brassicaceae aff. Atacama nivea | Brassicaceae | – | – | Desert | |
|  | Ephedra americana | Ephedraceae | Pingo-pingo | Shrub | Puna and Prepuna | |
|  | Adesmia sp. | Fabeceae | Arvejilla | Annual and perennial herbs | Puna and Prepuna | |
|  | Phacelia cuminingii | Hydrophyllaceae | – | Annual herbs | Puna and Prepuna | |
|  | Phacelia pinnatifida | Hydrophyllaceae | Sobaco negro | Annual and perennial herbs | Prepuna | |
|  | Cristaria sp. | Malvaceae | Malvilla | Annual | Puna and Prepuna | |
|  | Pappostipa frigida | Poaceae | Paja brava | Perennial Grass | Steppa | |
|  | Gilia sp. | Polemoniaceae | – | Annual | Puna and Prepuna | |
|  | Cistanthe sp. | Portulacaceae | – | Perennial Grass | Prepuna | |
|  | Fabiana sp. | Solaneaceae | – | Perennial Grass | Puna | |
|  | Junellia bryoides | Verbebaceae | Rosa de la cordillera | Shrub | Puna | |
|  |  |  |  |  |  |  |

2

Table 2: Site identifying code, radiocarbon dates, calendar year BP (95.4 % probability ranges; curve Shcal20, Oxcal 4.4) and former

agent for 28 rodent middens analyzed (see Fig. 1 for midden localities).SD: standard deviation. \*: Unidentified

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | ID |  | 14C age | SD |  | Lower cal yr BP | Upper cal yr BP | SD | Median |  | Lat. | Long. |  | Midden agent |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | QIN208A |  | 1310 | 15 |  | 1270 | 1115 | 35 | 1230 |  | 25.597 | 69.238 |  | Abrocoma |  |
|  |  |  |  |  |  |  |
|  |  | QIN208B |  | 180 | 15 |  | 280 | modern | 90 | 150 |  | 25.597 | 69.238 |  | Abrocoma |  |
|  |  | QIN211 |  | 8210 | 25 |  | 9270 | 9010 | 75 | 9105 |  | 25.597 | 69.238 |  | Abrocoma |  |
|  |  | QIN213 |  | 12855 | 35 |  | 15505 | 15145 | 90 | 15300 |  | 25.599 | 69.243 |  | \* |  |
|  |  | QIN214A |  | 14150 | 45 |  | 17350 | 17040 | 85 | 17185 |  | 25.599 | 69.243 |  | Abrocoma |  |
|  |  | QIN214B |  | 10175 | 25 |  | 11875 | 11635 | 70 | 11780 |  | 25.599 | 69.243 |  | Abrocoma |  |
|  |  | QIN214C |  | 12920 | 35 |  | 15575 | 15245 | 85 | 15400 |  | 25.599 | 69.243 |  | Abrocoma |  |
|  |  | QIN215A |  | 5700 | 20 |  | 6540 | 6315 | 45 | 6440 |  | 25.597 | 69.243 |  | Abrocoma |  |
|  |  | QIN215B |  | 1740 | 15 |  | 1700 | 1535 | 45 | 1600 |  | 25.597 | 69.243 |  | Abrocoma |  |
|  |  | QIN215C |  | 3515 | 15 |  | 3835 | 3645 | 50 | 3755 |  | 25.597 | 69.243 |  | Abrocoma |  |
|  |  | QIN216 |  | 7895 | 20 |  | 8775 | 8545 | 65 | 8635 |  | 25.597 | 69.23 |  | Phyllotis |  |
|  |  | QIN2171 |  | 8615 | 25 |  | 9660 | 9480 | 30 | 9540 |  | 25.596 | 69.22 |  | Abrocoma |  |
|  |  | QIN2172 |  | 8980 | 25 |  | 10215 | 9905 | 90 | 10060 |  | 25.596 | 69.22 |  | Abrocoma |  |
|  |  | QIN218 |  | 11035 | 30 |  | 13070 | 12795 | 60 | 12925 |  | 25.595 | 69.235 |  | Abrocoma |  |
|  |  | QIN219 |  | 10480 | 30 |  | 12605 | 12095 | 135 | 12345 |  | 25.594 | 69.235 |  | Phyllotis |  |
|  |  | QIN220A |  | 9190 | 25 |  | 10485 | 10230 | 60 | 10300 |  | 25.594 | 69.235 |  | \* |  |
|  |  | QIN237A |  | 2140 | 15 |  | 2115 | 2005 | 35 | 2065 |  | 25.594 | 69.235 |  | \* |  |
|  |  | QIN237B |  | 1120 | 20 |  | 1055 | 925 | 40 | 970 |  | 25.593 | 69.231 |  | Abrocoma |  |
|  |  | QIN238 |  | 9565 | 25 |  | 11075 | 10690 | 125 | 10865 |  | 25.597 | 69.238 |  | Abrocoma |  |
|  |  | QIN242 |  | 11705 | 35 |  | 13600 | 13455 | 45 | 13535 |  | 25.6 | 69.24 |  | Abrocoma |  |
|  |  | QIN243A |  | 10015 | 25 |  | 11625 | 11265 | 110 | 11450 |  | 25.597 | 69.238 |  | Abrocoma |  |
|  |  | QIN2451 |  | 11950 | 30 |  | 14010 | 13605 | 100 | 13775 |  | 25.597 | 69.238 |  | \* |  |
|  |  | QIN2452 |  | 9125 | 25 |  | 10340 | 10185 | 35 | 10235 |  | 25.597 | 69.238 |  | \* |  |
|  |  | QIN246 |  | 10200 | 25 |  | 11925 | 11650 | 55 | 11810 |  | 25.597 | 69.238 |  | Abrocoma |  |
|  |  | QIN249B |  | 4230 | 20 |  | 4845 | 4585 | 65 | 4730 |  | 25.597 | 69.239 |  | \* |  |
|  |  | QIN256 |  | 345 | 15 |  | 445 | 305 | 40 | 395 |  | 25.593 | 69.231 |  | Abrocoma |  |
|  |  | QIN259 |  | 10105 | 25 |  | 11765 | 11325 | 125 | 11635 |  | 25.594 | 69.234 |  | Abrocoma |  |
|  |  | QIN260A |  | 1740 | 15 |  | 1700 | 1535 | 45 | 1600 |  | 25.593 | 69.232 |  | Abrocoma |  |