|  |  |
| --- | --- |
| A red circle with a white letterDescription automatically generated | Supplementary material for  Hui Zhou, Xiaoqing Wang & Zhijun Zhao. 2024. **Early Neolithic plant exploitation in north-western China: archaeobotanical evidence from Beiliu.** *Antiquity* 98.  Authors for correspondence ✉ wxq0270@sina.com & zjzhao@cass.org.cn |

**测年序号**

*Figure S1. Chronological samples: a) F2②* Panicum miliaceum*; b) F2③* Panicum miliaceum*; c) F2⑤* Panicum miliaceum*; d) F2⑤ braised clay* Panicum miliaceum*; e) H57* Panicum miliaceum*; f) H52②* Oryza sativa *(figure by authors).*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Region** | **Middle and Lower Yangtze River** | | | **Hui-Hanshui region** | **Middle and Lower Yellow River** | | | | **Liaoxi Region** |
| **Age** | **Hubei region** | **Dongting Lake Plain** | **Yangtze Delta** | **Hui and Hanshui rivers** | **Henan** | **Shaanxi** | **Shandong** | **Hebei** | **Liaoxi region** |
| 9000-7000 BC |  |  | Shangshan |  | Dagang |  |  | Nanzhuangtou  Donghulin |  |
| 7000-5000 BC | Pengtoushan  Chengbeixi | Pengtoushan  Zaoshi | Xiaohuangshan  Kuahuqiao | Jiahu phase 1 &  Baligang  Jiahu phase 2 | Lijiagou  Peiligang | **Laoguanatai** | Houli | Cishan | Xinglongwa  Zhaobaogou |
| 5000-3000 BC | Daxi  Qujialing | Daxi  Qujialing | Hemudu-Majiabang  Songze  Liangzhu | Hui River:  Longqiuzhuang-  Dawenkou  Hanshui River:  Yangshao-  Qujialing | Yangshao | Yangshao | Beixin  Dawenkou | Yangshao | Hongshan |

**Table S1. A summary table of the chronological periods, and their related timespans, is referred to in this text after Zhang and Hung (2013: tab. 1).**

**Table S2. Charred plant remains of the Laoguantai culture at the Beiliu site.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Taxa** | **Ash pit** | **House Site (F2)** | **Total** |
|  | **Crops** |  |  |
| *Setaria italica* | 14 | 10 | 24 |
| *Panicum miliaceum* | 558 | 1247 | 1805 |
| *Oryza sativa* | 3 |  | 3 |
| **Non-crops** | | | |
| *Suaeda glauca* | 4 |  | 4 |
| *Bassia scoparia* | 1 |  | 1 |
| *Setaria viridis* | 1 | 1 | 2 |
| Poaceae |  | 1 | 1 |
| *Digitaria sanguinalis* | 1 |  | 1 |
| *Poa annua* | 1 |  | 1 |
| *Lespedeza bicolor* |  | 1 | 1 |
| *Melilotus officinalis* |  | 2 | 2 |
| *Vicia sepium* |  | 1 | 1 |
| *Glycine soja* | 2 | 3 | 5 |
| *Perilla frutescens* | 56 | 7 | 63 |
| *Amethystea caerulea* | 1 |  | 1 |
| *Alkekengi officinarum* |  | 2 | 2 |
| *Polygonum aviculare* |  | 1 | 1 |
| *Ziziphus jujuba* var. *spinosa* | 13 | 11 | 24 |
| *Celtis sinensis* | 4 |  | 4 |
| *Vitis vinifera* | 2 |  | 2 |
| Unknown | 7 | 9 | 16 |
| Total | 668 | 1296 | 1964 |

**Table S3. Crop seed quantity, percentage, and ubiquity at Beiliu from Laoguantai culture.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Taxa** | **Quantity** | **Percentage**  **(n =1832 )** | **Ubiquity**  **(n = 81)** |
| *Setaria italica* | 24 | 1.3% | 21% |
| *Panicum miliaceum* | 1805 | 98.5% | 86.4% |
| *Oryza sativa* | 3 | 0.2% | 2.5% |

**Table S4. Measurement of broomcorn millet size (mm)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Excavation unit** | **Length** | **Width** | **Thickness** | **Length/Width** | **Length/Thickness** |
| 1 | F2① | 1.62 | 1.16 | 1.02 | 1.40 | 1.59 |
| 2 | F2① | 1.26 | 1.04 | 0.85 | 1.21 | 1.48 |
| 3 | F2① | 1.42 | 1.02 | 0.86 | 1.39 | 1.65 |
| 4 | F2① | 1.45 | 1.14 | 0.79 | 1.27 | 1.84 |
| 5 | F2① | 1.42 | 0.85 | 0.67 | 1.67 | 2.12 |
| 6 | F2① | 1.25 | 1.05 | 0.87 | 1.19 | 1.44 |
| 7 | F2① | 1.5 | 1.07 | 0.9 | 1.40 | 1.67 |
| 8 | F2② | 1.64 | 1.09 | 0.87 | 1.50 | 1.89 |
| 9 | F2② | 1.64 | 1.13 | 0.97 | 1.45 | 1.69 |
| 10 | F2③ | 1.59 | 1.15 | 1.02 | 1.38 | 1.56 |
| 11 | F2③ | 1.4 | 0.92 | 0.96 | 1.52 | 1.46 |
| 12 | F2③ | 1.28 | 1.09 | 0.9 | 1.17 | 1.42 |
| 13 | F2③ | 1.73 | 1.13 | 1.06 | 1.53 | 1.63 |
| 14 | F2④ | 1.61 | 1.34 | 1.08 | 1.20 | 1.49 |
| 15 | F2④ | 1.39 | 1.21 | 1.04 | 1.15 | 1.34 |
| 16 | F2④ | 1.64 | 1.4 | 1.28 | 1.17 | 1.28 |
| 17 | F2⑤ | 1.53 | 0.98 | 0.79 | 1.56 | 1.94 |
| 18 | F2⑤ | 1.46 | 0.87 | 0.76 | 1.68 | 1.92 |
| 19 | F2⑤ | 1.33 | 0.91 | 0.72 | 1.46 | 1.85 |
| 20 | F2⑤ | 1.59 | 0.97 | 0.78 | 1.64 | 2.04 |
| 21 | F2⑤ | 1.41 | 0.91 | 0.85 | 1.55 | 1.66 |
| 22 | F2⑤ | 1.59 | 0.93 | 0.7 | 1.71 | 2.27 |
| 23 | F2⑤ | 1.81 | 1.09 | 1 | 1.66 | 1.81 |
| 24 | F2⑤ | 1.46 | 1.16 | 1.16 | 1.26 | 1.26 |
| 25 | F2⑤ | 1.61 | 1.31 | 1.24 | 1.23 | 1.30 |
| 26 | F2⑤ | 1.61 | 1.37 | 1.12 | 1.18 | 1.44 |
| 27 | F2⑤ | 1.33 | 1 | 0.92 | 1.33 | 1.45 |
| 28 | F2⑤ | 1.53 | 1.29 | 1.28 | 1.19 | 1.20 |
| 29 | F2⑤ | 1.68 | 1.43 | 1.08 | 1.17 | 1.56 |
| 30 | H57 | 1.19 | 1.05 | 0.78 | 1.13 | 1.53 |
| 31 | H57 | 1.57 | 1.14 | 0.91 | 1.38 | 1.73 |
| 32 | H57 | 1.13 | 0.77 | 0.68 | 1.47 | 1.66 |
| 33 | H57 | 1.63 | 1.18 | 1.04 | 1.38 | 1.57 |
| 34 | H53③ | 1.57 | 1.24 | 1.08 | 1.27 | 1.45 |
| 35 | H53③ | 1.55 | 1.22 | 1.28 | 1.27 | 1.21 |
| 36 | H53③ | 1.77 | 1.48 | 1.25 | 1.20 | 1.42 |
| 37 | H53③ | 1.73 | 1.32 | 1.26 | 1.31 | 1.37 |
| 38 | H53③ | 1.65 | 1.22 | 1.05 | 1.35 | 1.57 |
| 39 | H53③ | 1.71 | 1.32 | 1.4 | 1.30 | 1.22 |
| 40 | H53③ | 1.67 | 1.34 | 1.18 | 1.25 | 1.42 |
| Average | | 1.52 | 1.13 | 0.99 | 1.36 | 1.58 |