Figure 1a. Location of the Gulhwa site.
Figure 1b. The Gulhwa site situated at the boundary between floodplain and toeslope.
Figure 1c. Plot of excavated field of Gulhwa, Bronze Age field system was placed in the middle of site, but unified Silla, and partly continuously used until Koryeo dynasty period (11th -15th Centuries AD).

Figure 1d (upper left). Relic of Unified Silla paddy field system.

Figure 1e (upper right). Bronze Age paddy field system.

(Plot maps and photos provided by the Ulsan Cultural Property Institute)
Figure 1f. Soil profile and location of samples GSA unit
Figure 1g. Soil profile and location of samples GSC unit
Figure 2a and b. Location of the Pyunggeo Site. Paddy field section is located in rear whereas dry field is occupying flat sandy plain. Dwelling pits were densely located on the slightly accreted bedform inbetween dry field sector and paddy field sector.
Figure 2c (upper) and 2d (lower). Location of sampling location in the east part of excavated Bronze Age (c) Three Kingdoms’ field system; d. Presence of pre-modern paddy field was noted, but not fully excavated.
Figure 2e. Soil profile and location of PG samples.
Figure 2f (upper right). Three Kingdom’s period paddy field system.
Figure 2g (lower right). Bronze Age paddy field system.
(Plot maps and photos provided by Center for Culture and History, Kyungnam Development Institute)

Figure 3a (left). Location of Yongjeong, Cheonan.
Figure 3b (right). Photo of sampled horizon.
Figure 4a. SCCF type XA (marked as 2), compared with typical dusty iron clay coatings (marked as 1), it has highly concentrated silt size particles including minute mica flakes with stipple speckled b-fabric and no interference colour in the clay matrix, aggregation of impregnative Fe occurs began to superimpose on it from early historical paddy soil GSA 4.

Figure 4b. SCCF type XB as a papule (PPL).

Figure 4c. SCCF type YA, stipple speckled distribution of concentrated silt-size particles but with a high amorphous Fe from historical paddy field, PG 3 (PPL).

Figure 4d. SCCF type Y occurred as interlaced clay intercalation and single aggregate from GSC 7.
Figure 4e. SCCF type Z (PPL).
Figure 5. Various types of SCCF:
   a. Internal fabric of type XA with relatively stipple speckled distribution of silt-size particles and 
      pale clay matrix from pre-/modern paddy field, GSC 7 (PPL).
   b. Aggregates of type XA from modern reference YJ 2 (PPL).
   c. A part of infilling of type XA from modern reference (PPL).
   d. Internal fabric of type XA with relatively stipple speckled distribution of silt-size particles and 
      pale clay matrix from historical paddy soils, Gulhwa (PPL).
   e. Fragmented papule of type XB from GSC 7 (PPL).
   f. Fragmented papule of type XB from GSC 6 (PPL).
   g. A large fragmented papule of Type YA, the internal fabric is different from iron clay infillings 
      embedded in the fabric from modern paddy field, as a compound crust GSC 8 (PPL).
   h. Type Z, which is similar to type XA with a pale clay matrix and concentrated silt-size particles. 
      However silt size particle including micro fragmented organic matter tend to be coarser from 
      GSA 4, historical paddy soil (PPL).

Figure 6. Example of SCCF X and Y type examined loci at the thin section GSC 7; 
photographic image in PPL(left) and electron image (right).
Figure 7. The results of microprobe of section GSC 7: a. Si; b. Al; c. Fe; d. Ca