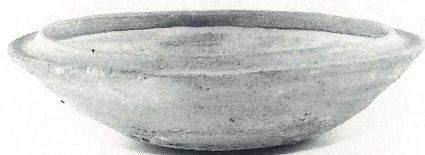


13



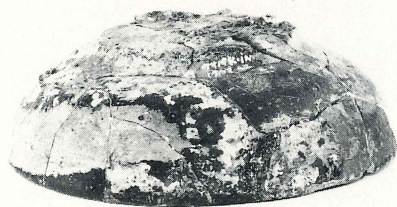
19



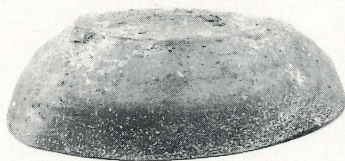
14



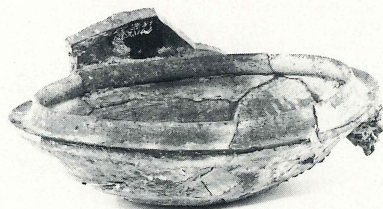
20



15



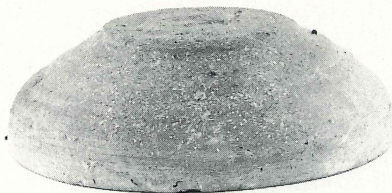
21



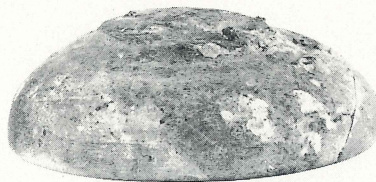
16



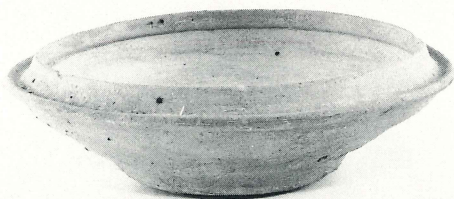
24



17



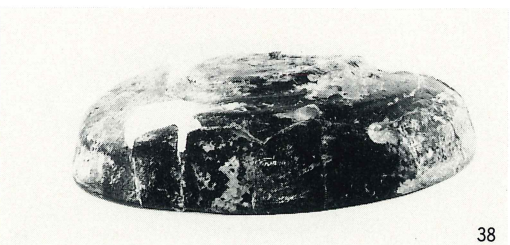
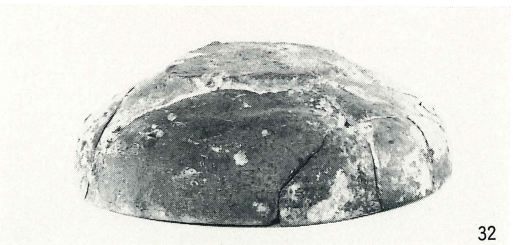
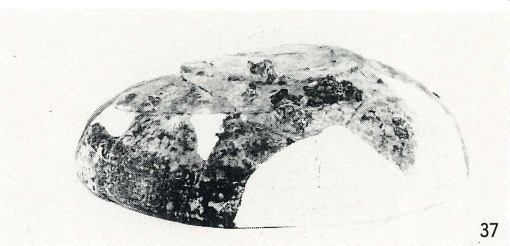
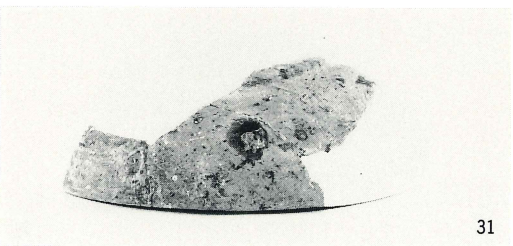
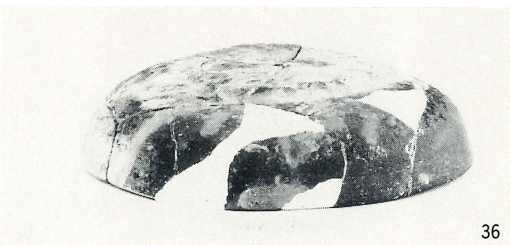
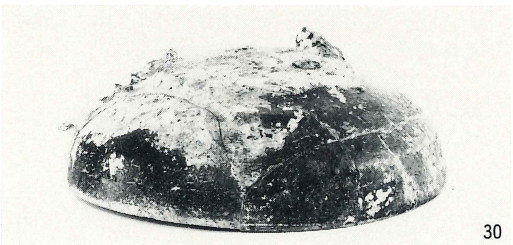
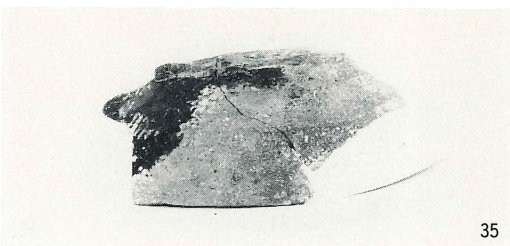
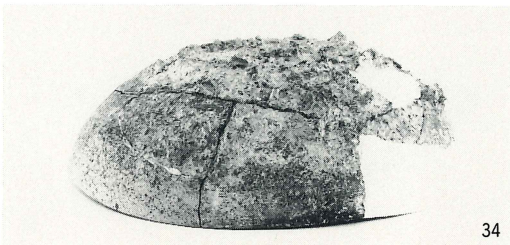
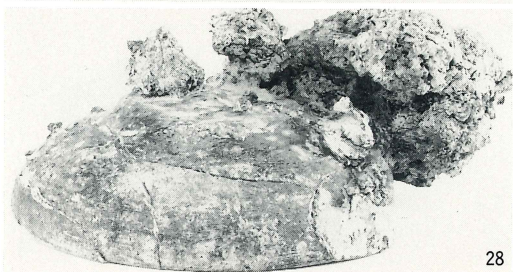
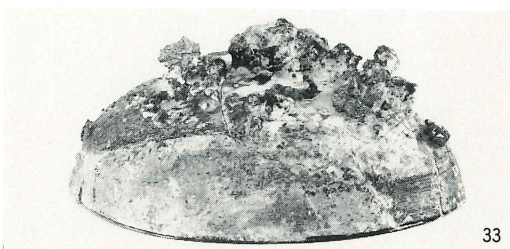
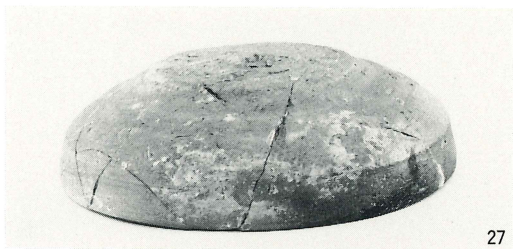
25

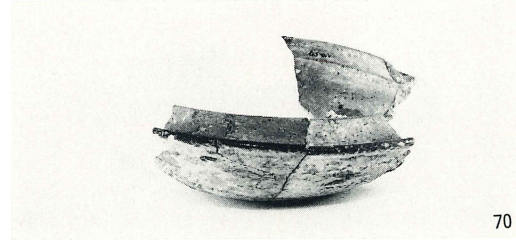
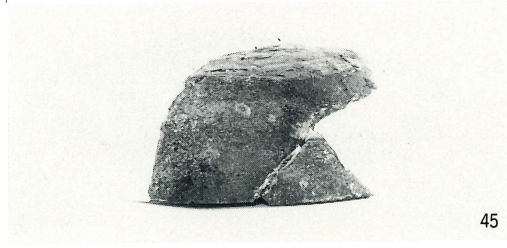
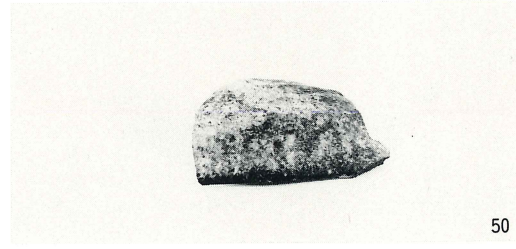
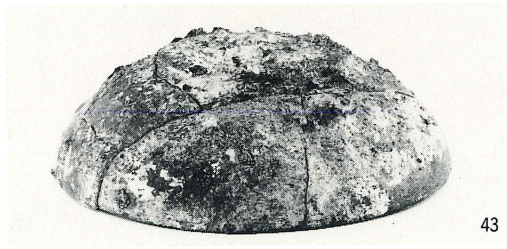
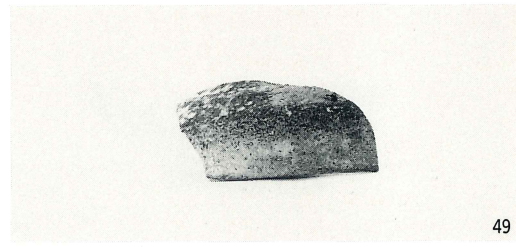
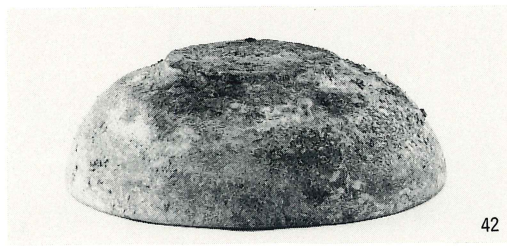
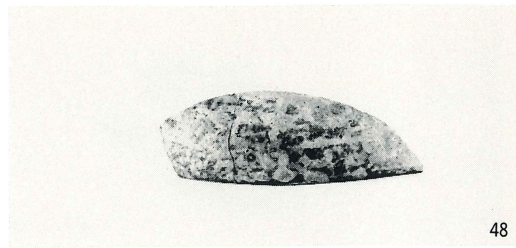
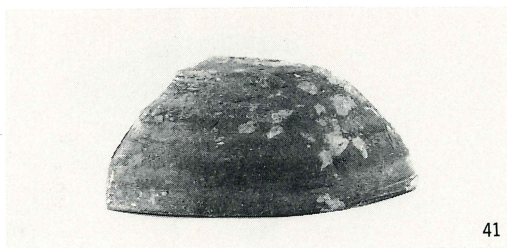
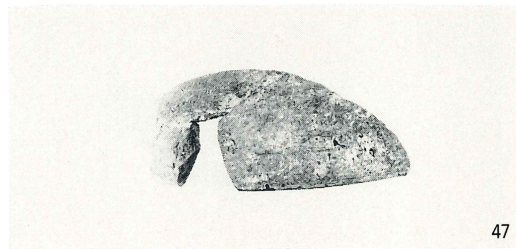
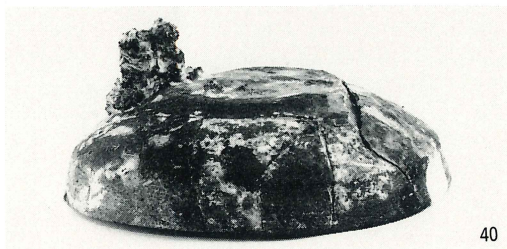
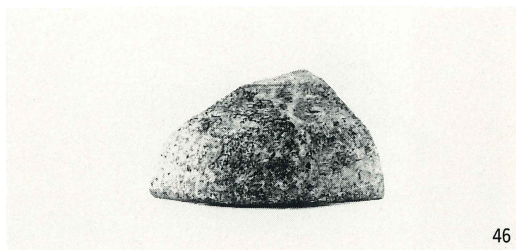
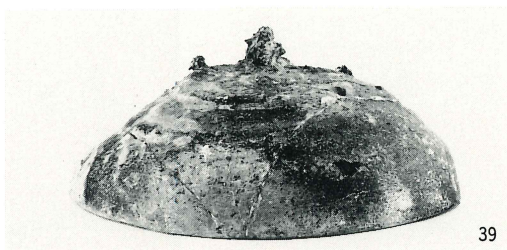


18



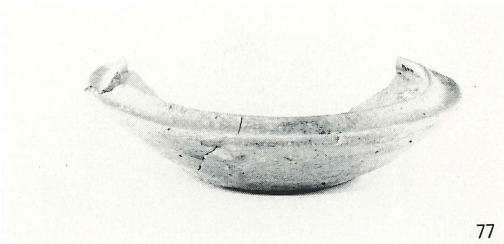
26



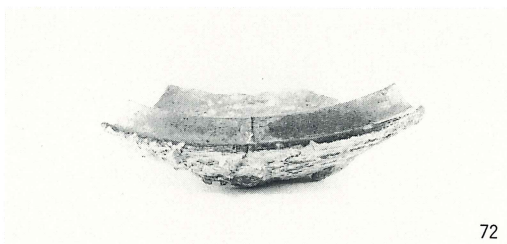




71



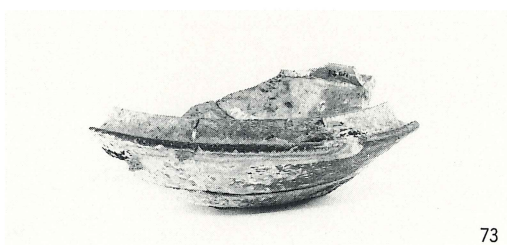
77



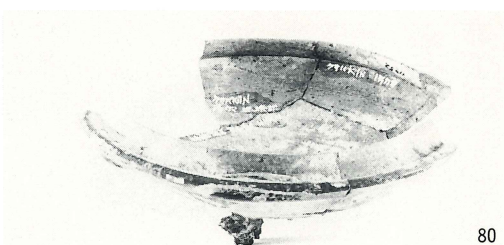
72



79



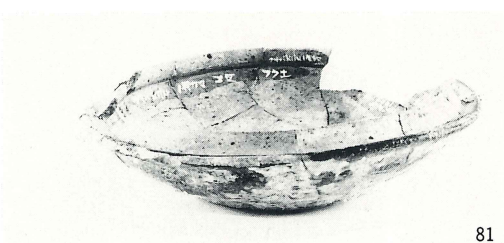
73



80



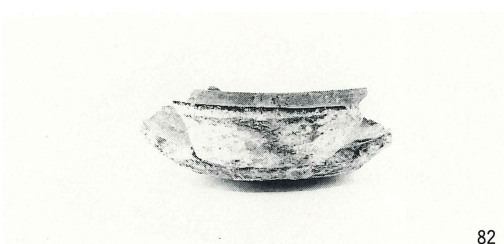
74



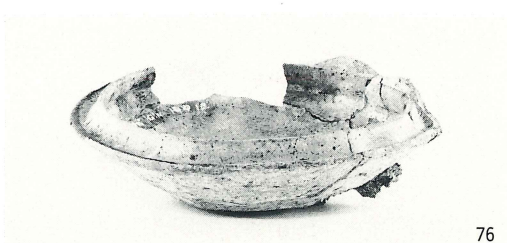
81



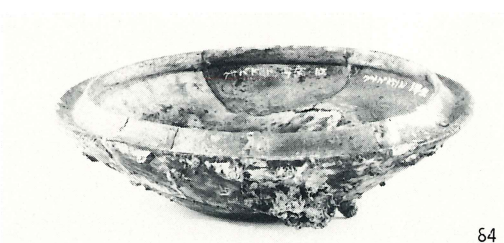
75



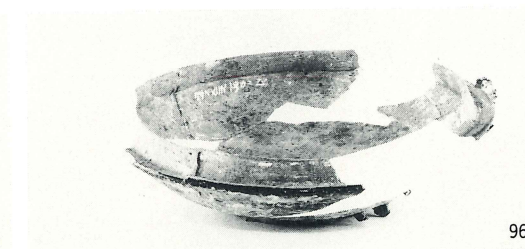
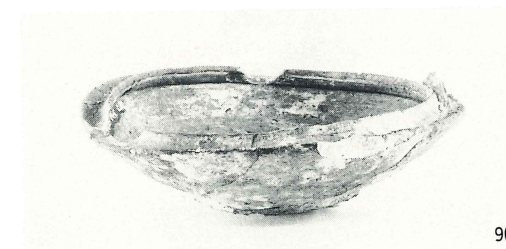
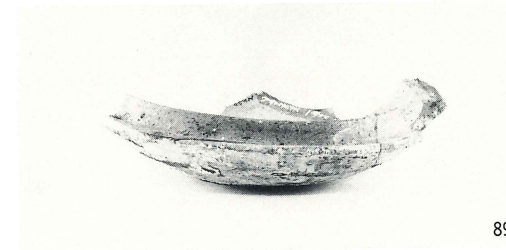
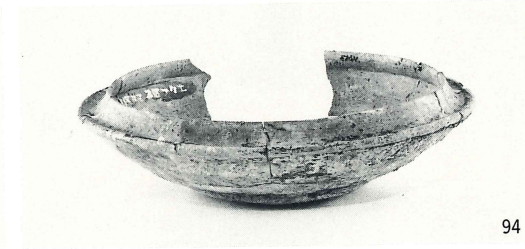
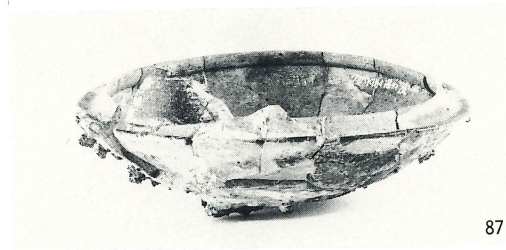
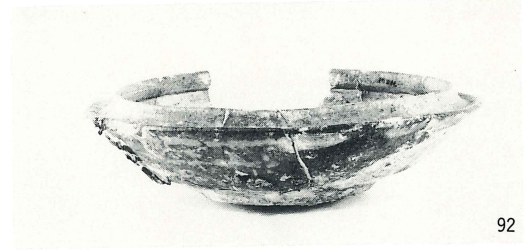
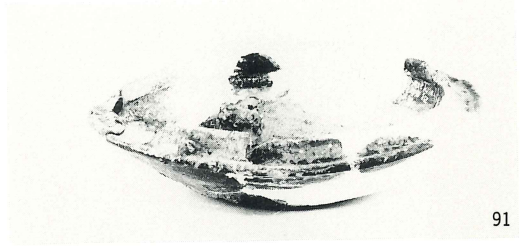
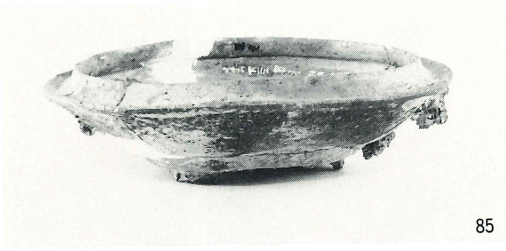
82

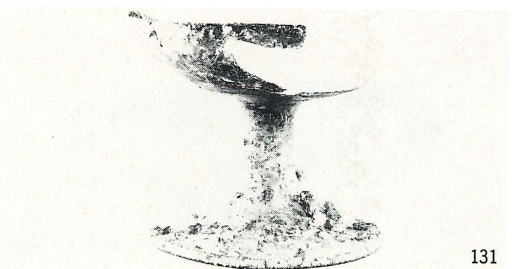
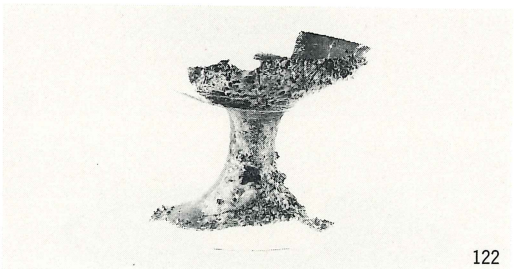
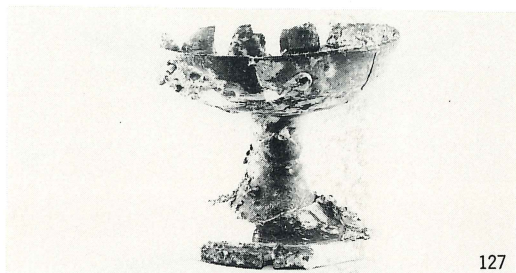


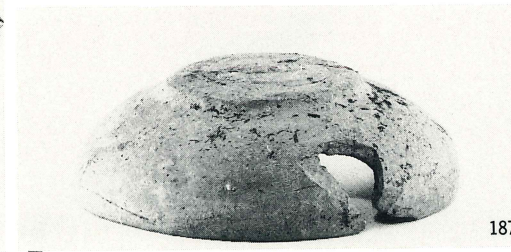
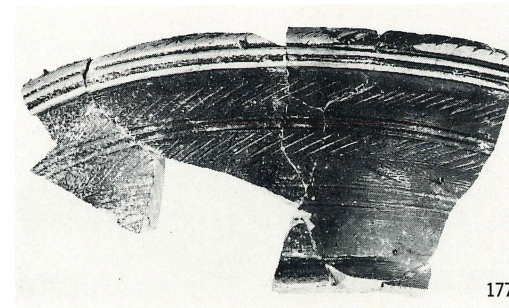
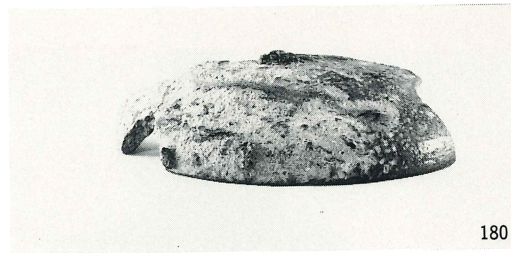
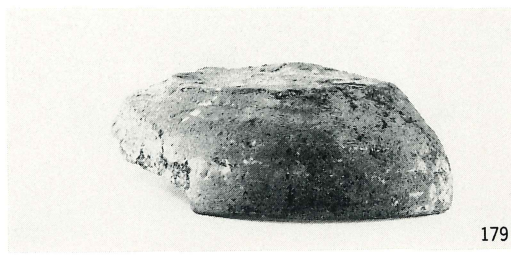
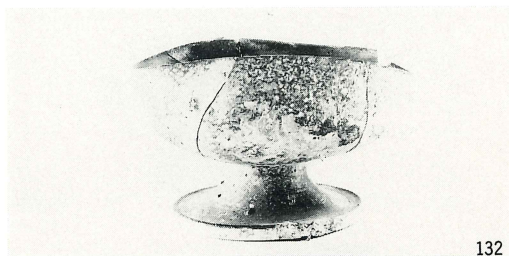
76



84

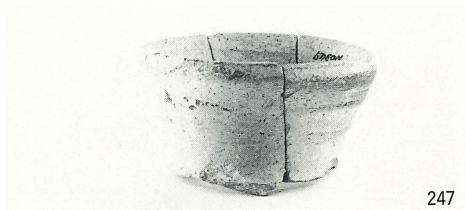




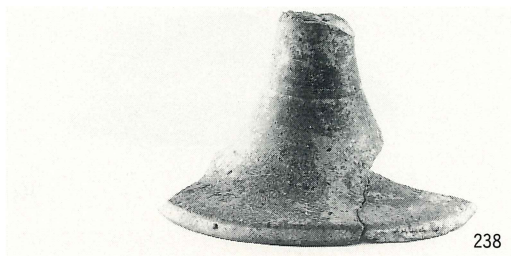




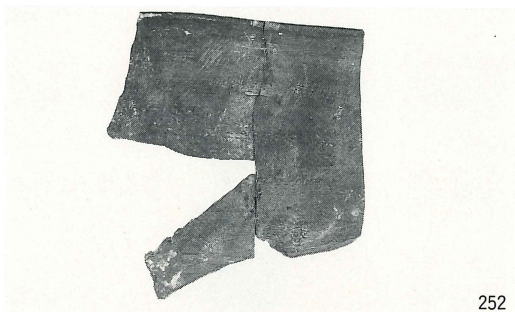
199



247



238



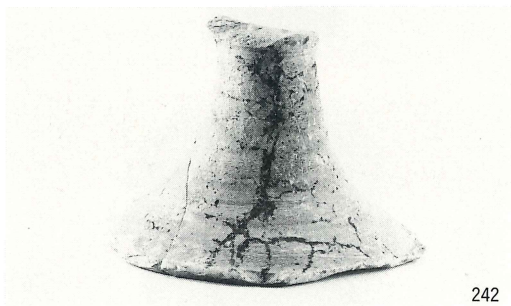
252



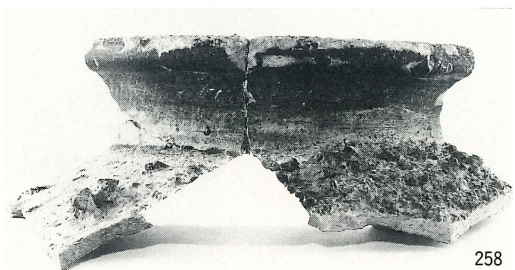
240



253



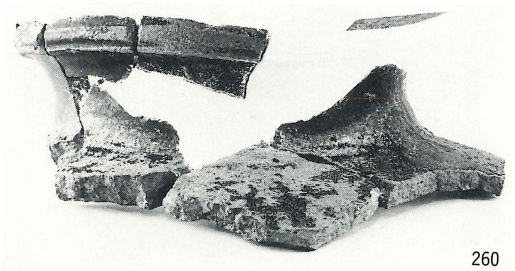
242



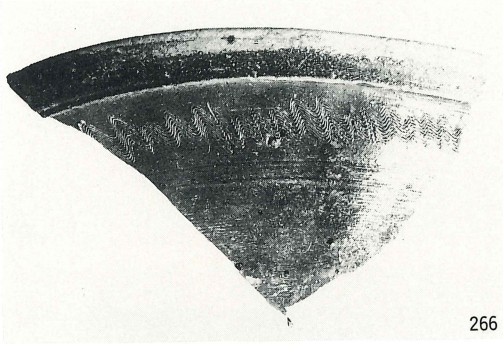
258



244



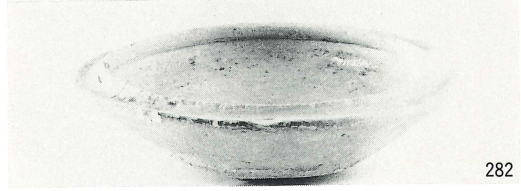
260



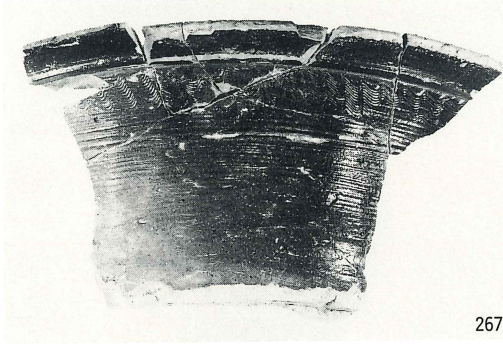
266



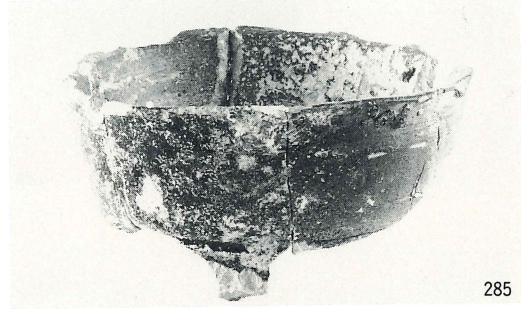
269



282



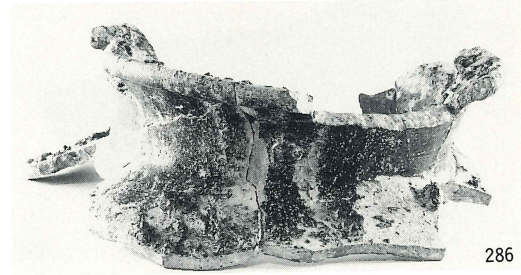
267



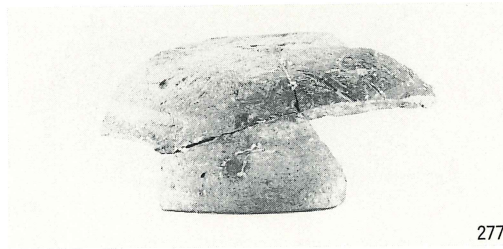
285



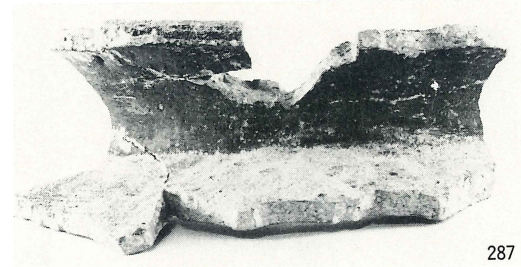
268



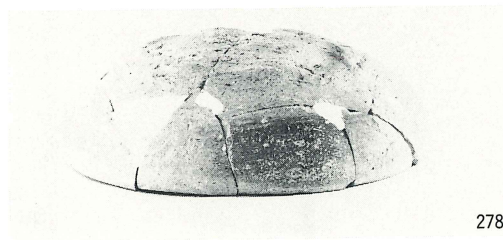
286



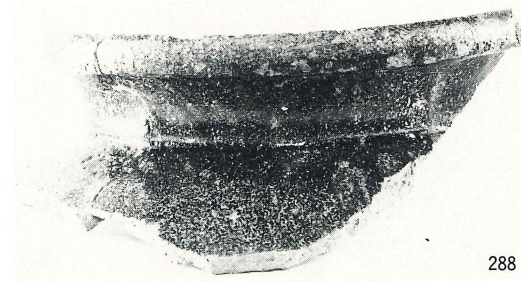
277



287



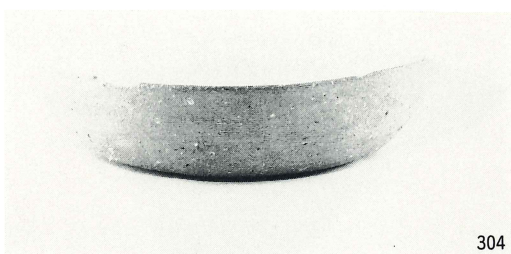
278



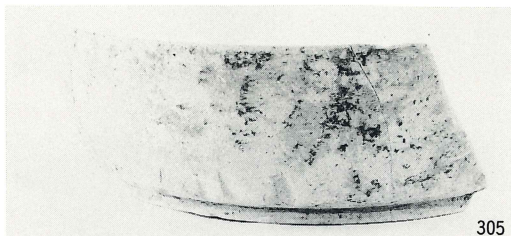
288



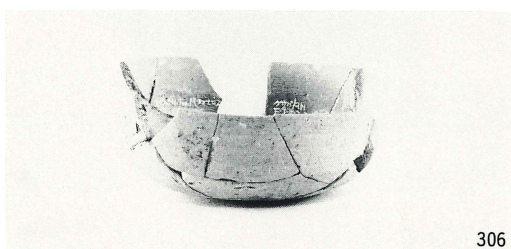
289



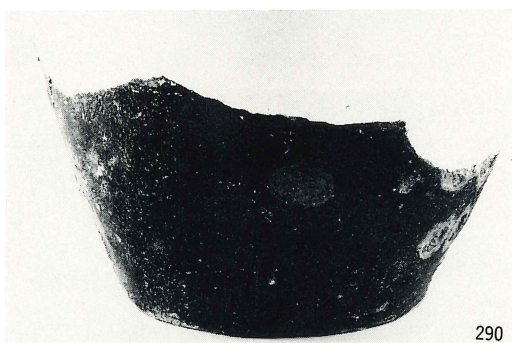
304



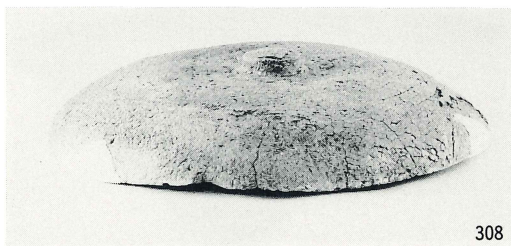
305



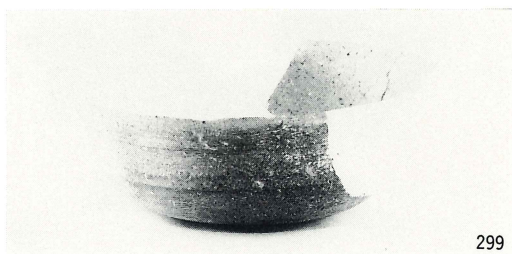
306



290



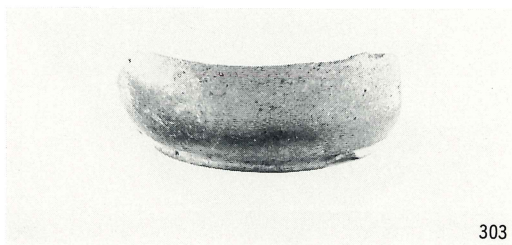
308



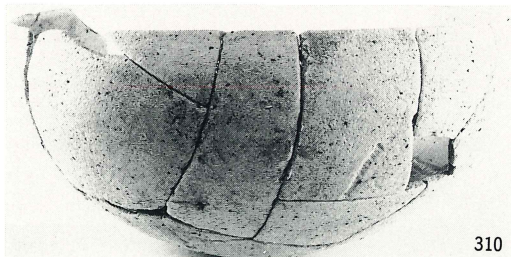
299



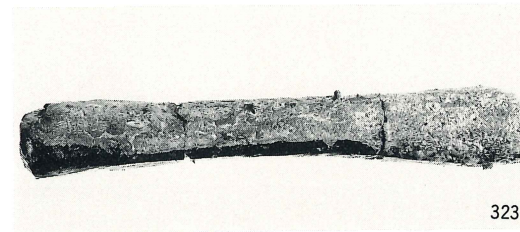
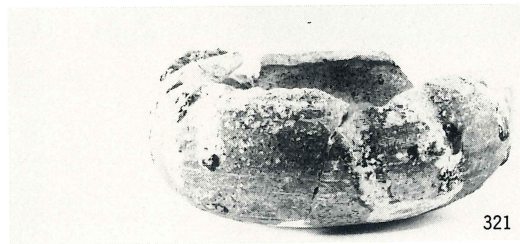
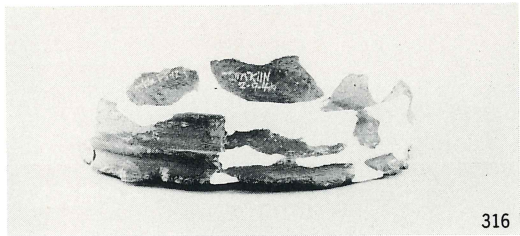
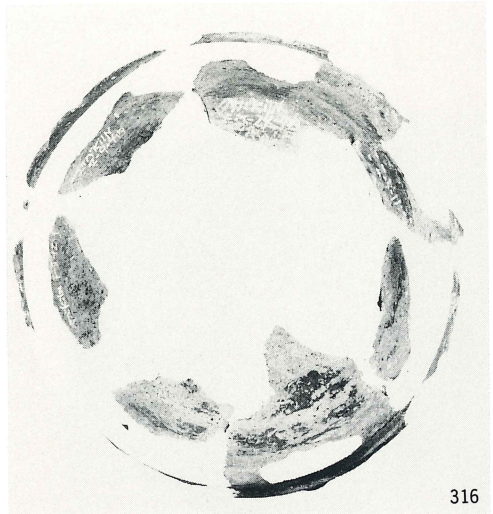
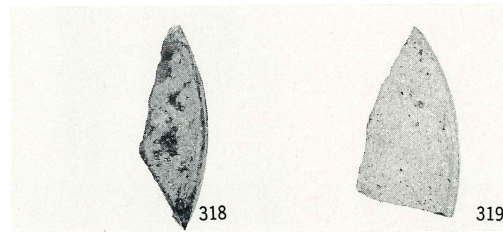
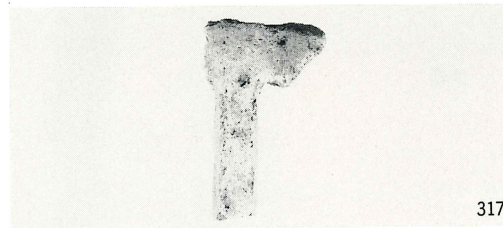
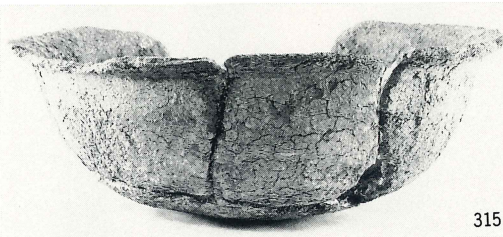
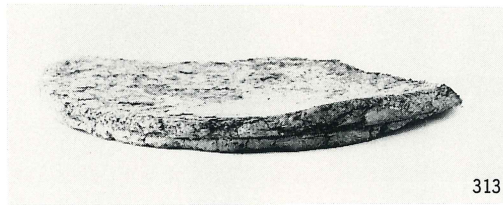
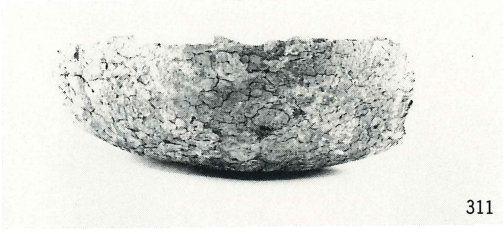
309



303

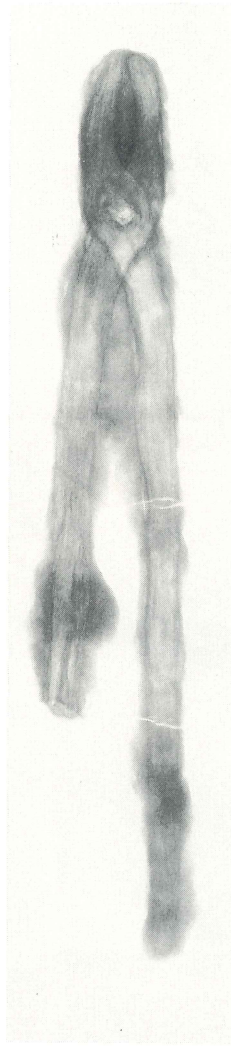


310

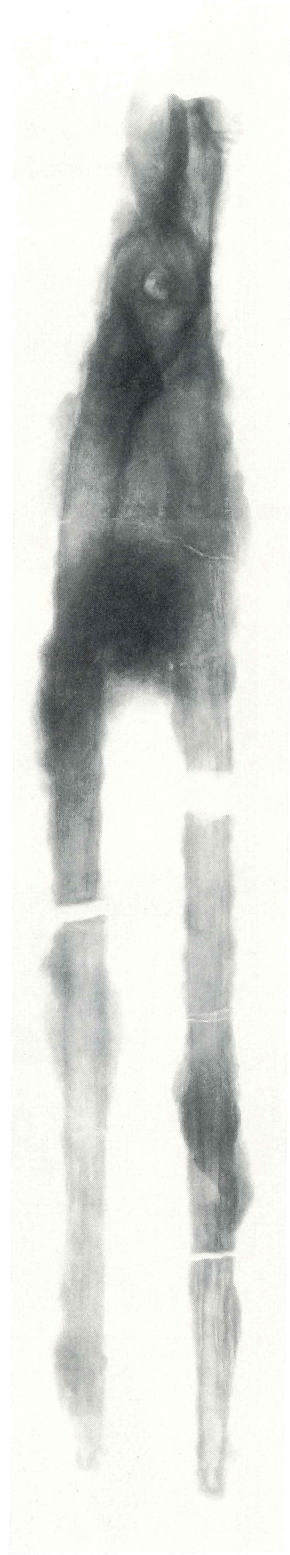


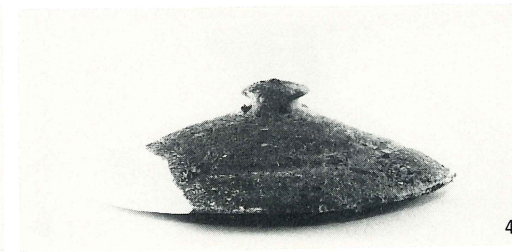
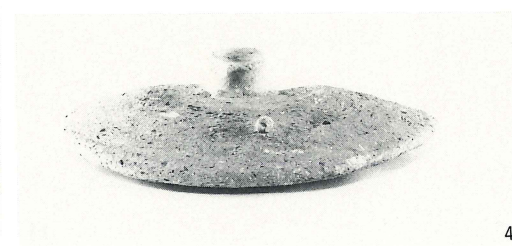
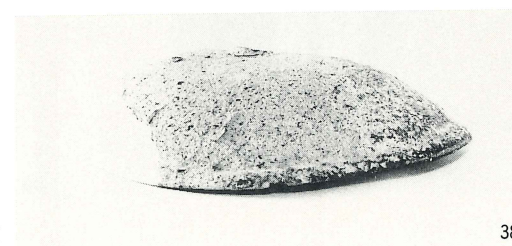
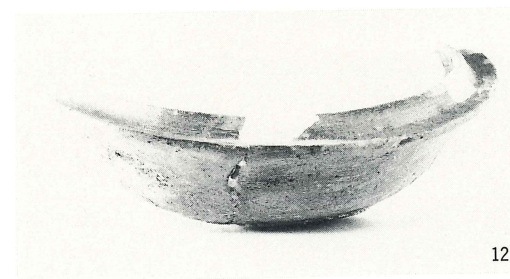
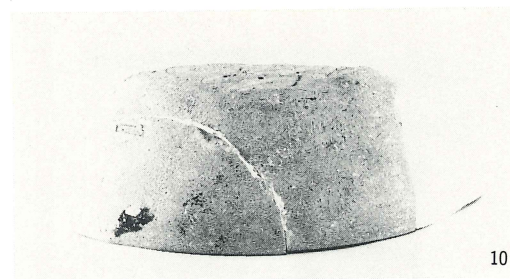
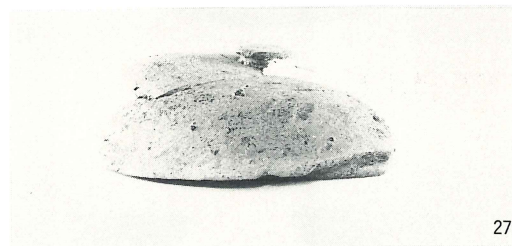
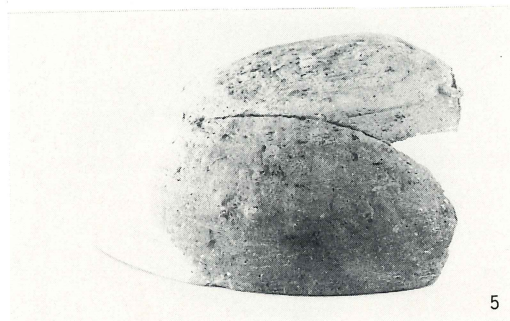
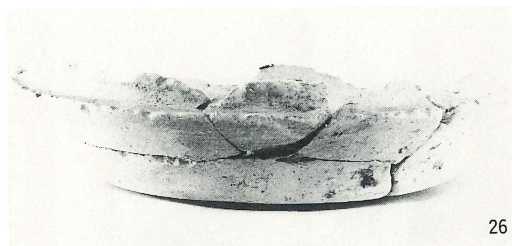


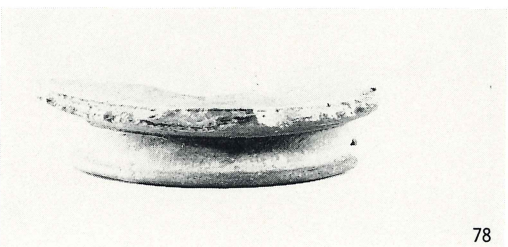
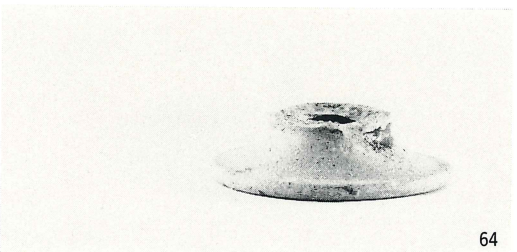
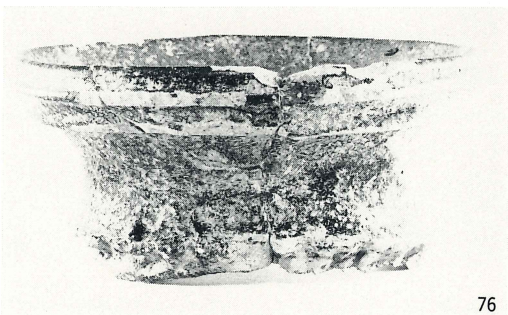
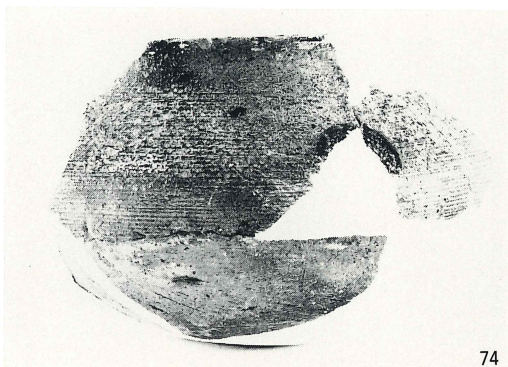
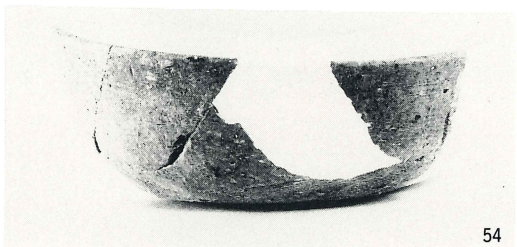
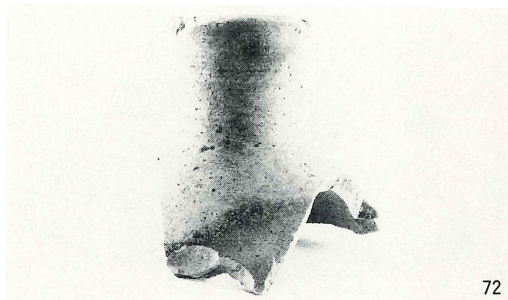
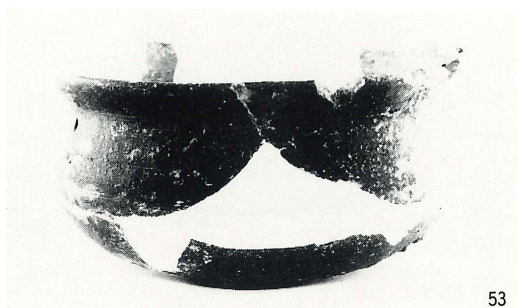
青磁碗

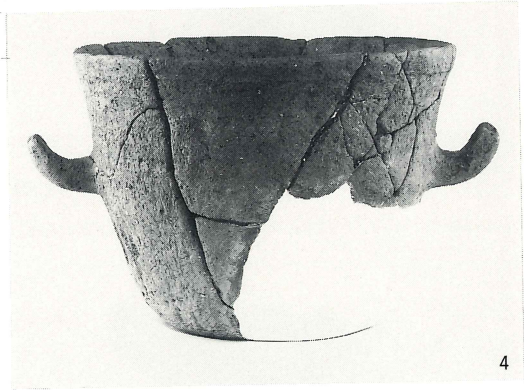
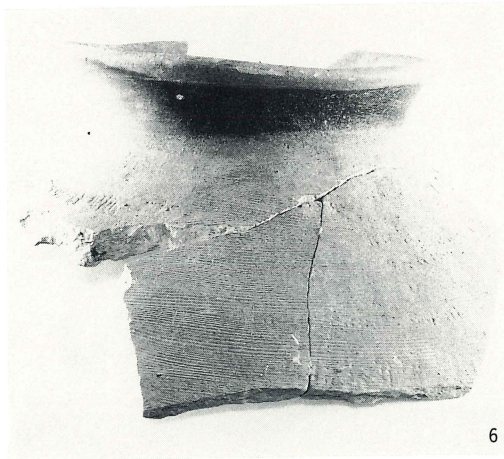
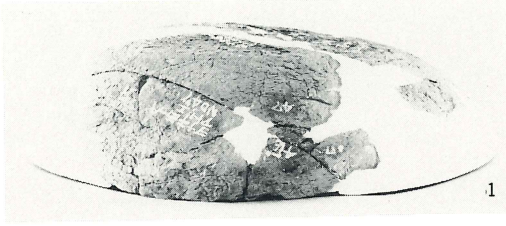


鉄針

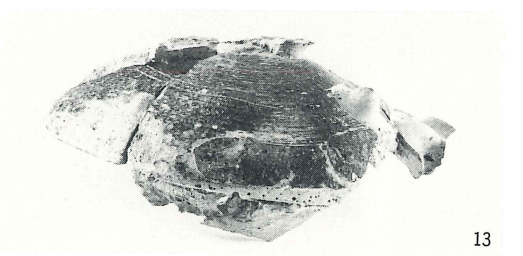
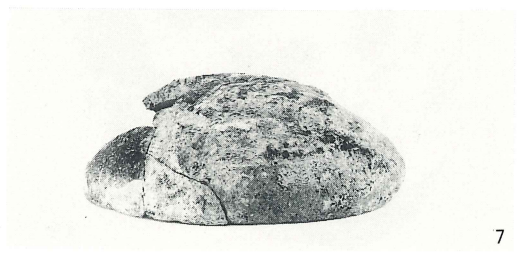
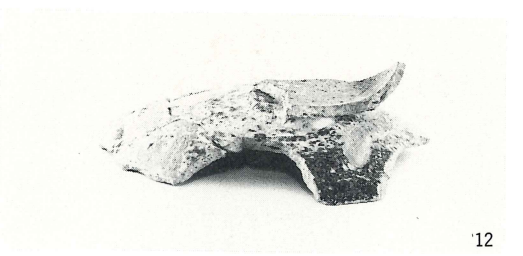
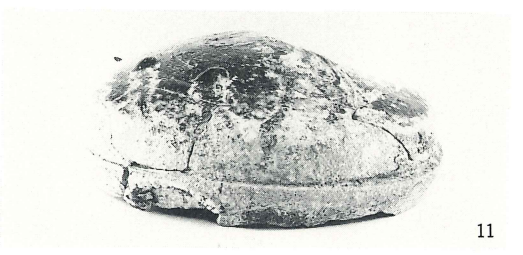
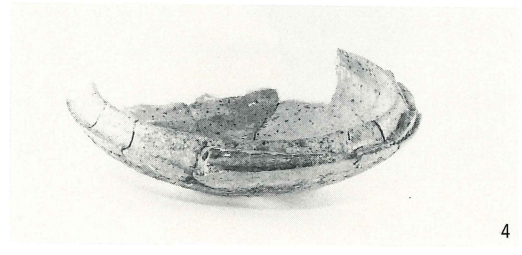
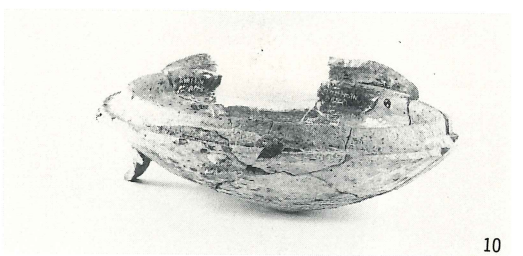
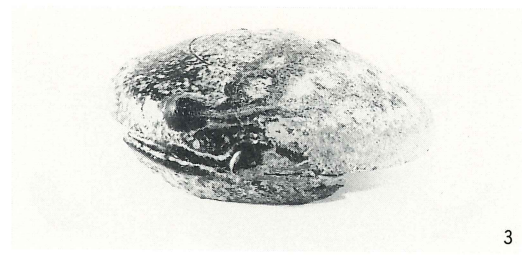
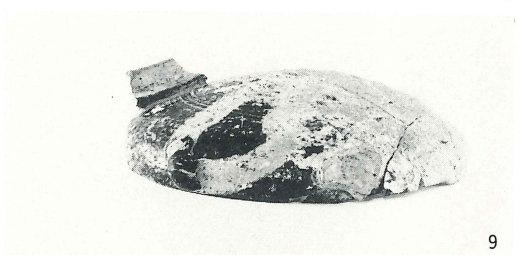
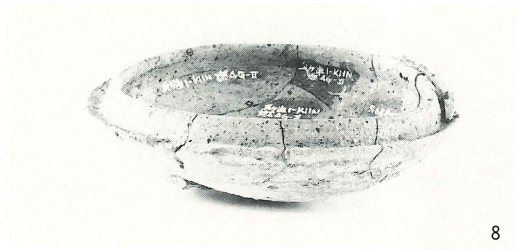
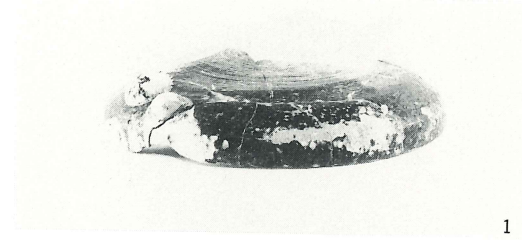


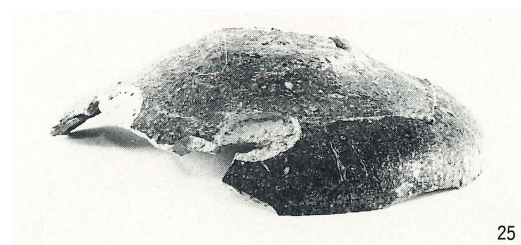
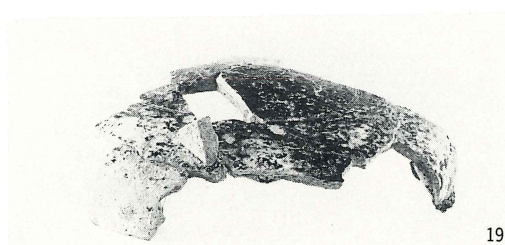
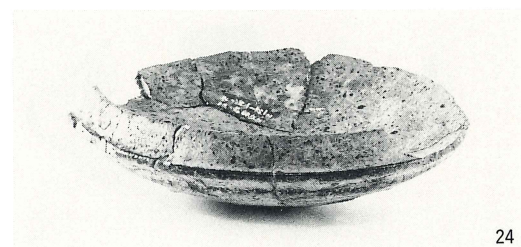
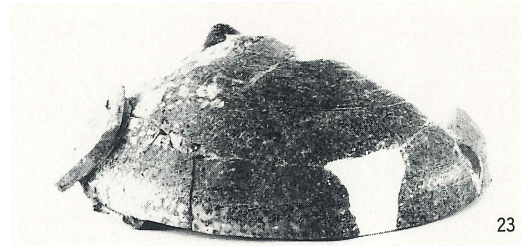
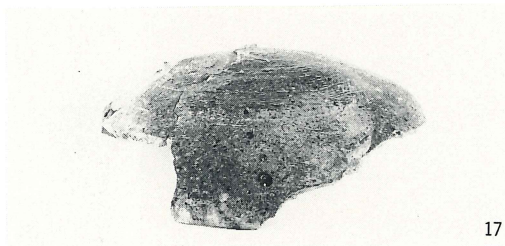
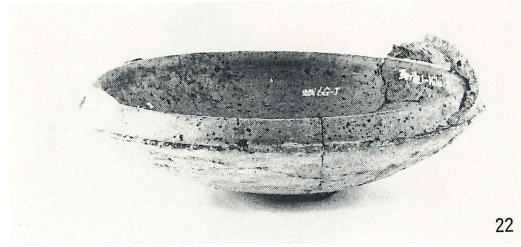
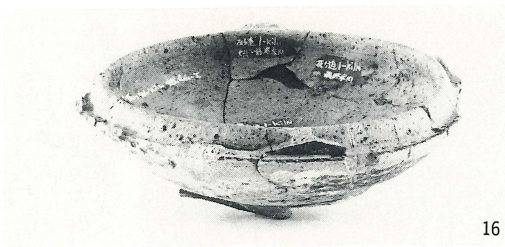
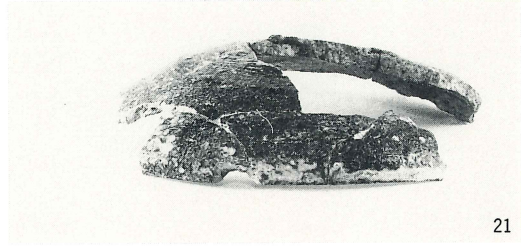
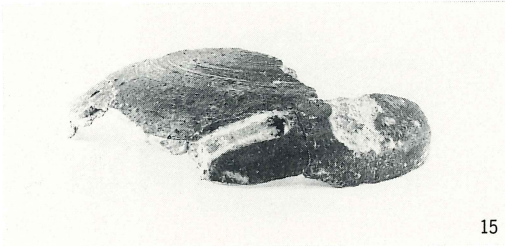


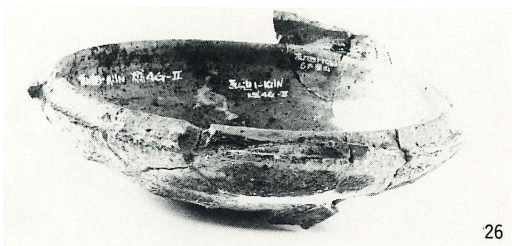




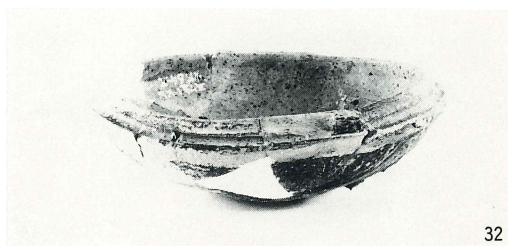
夜鳴池甕棺



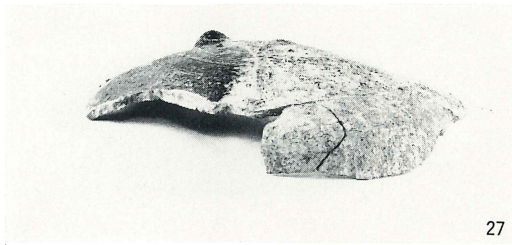




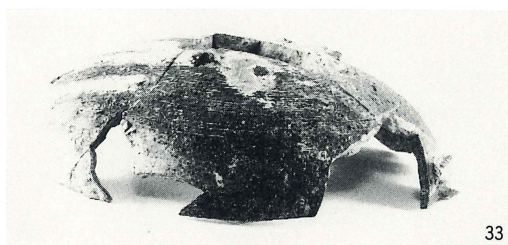
26



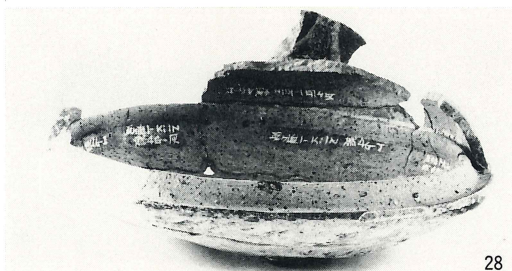
32



27



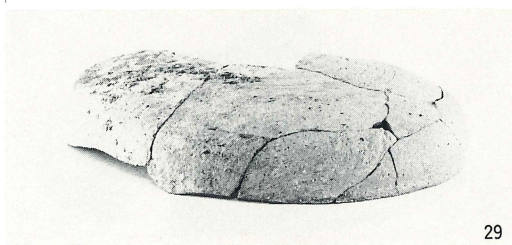
33



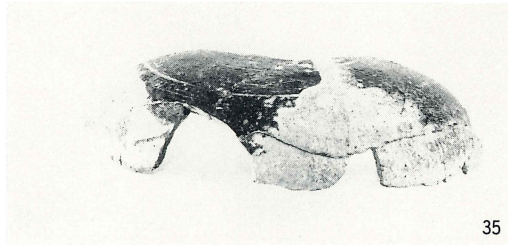
28



34



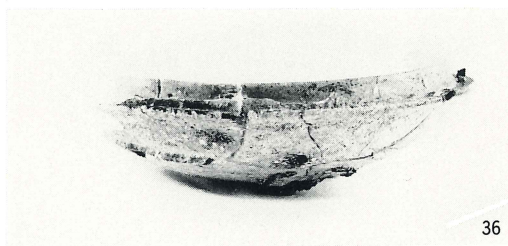
29



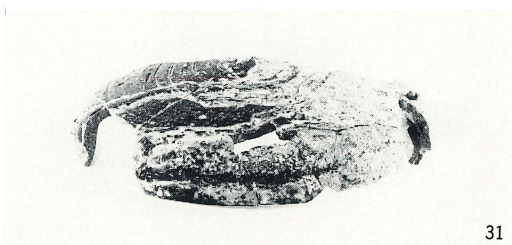
35



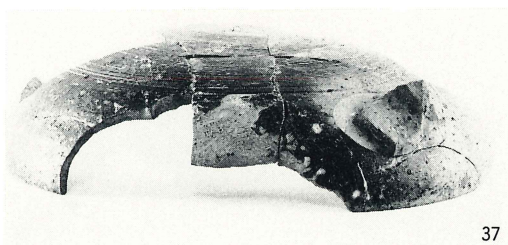
30



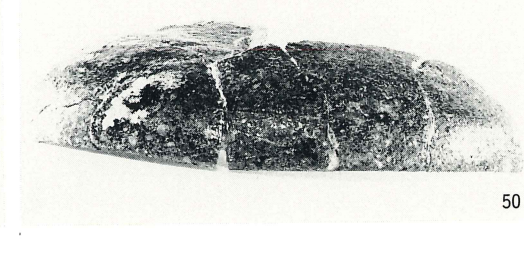
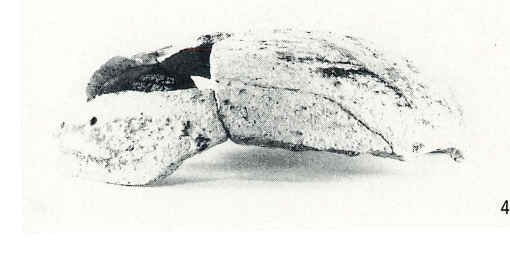
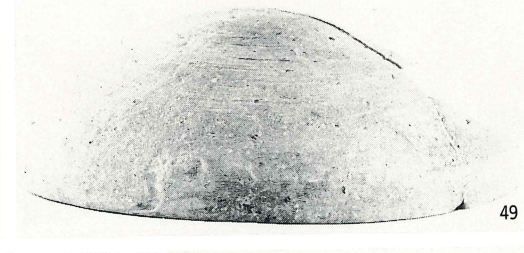
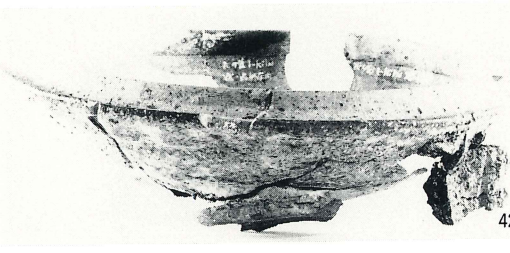
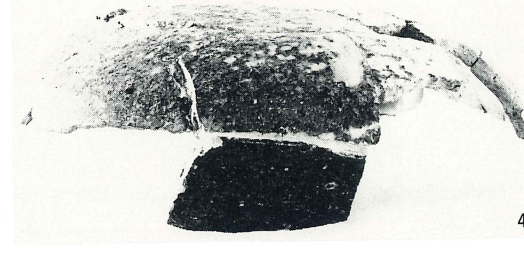
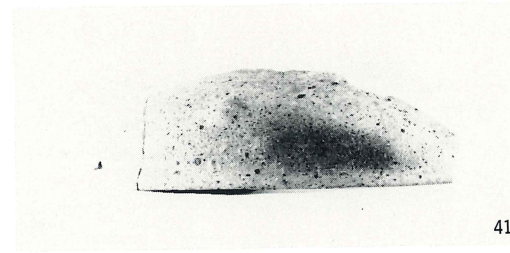
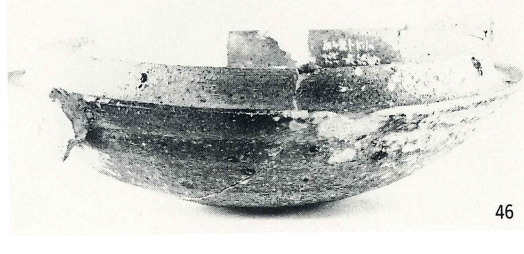
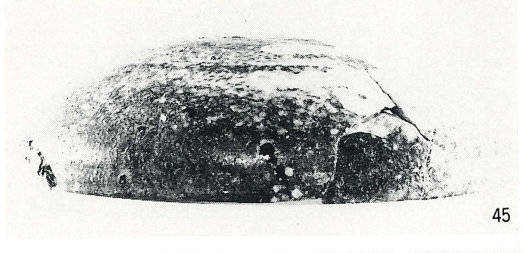
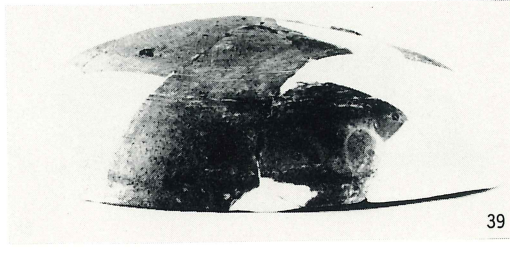
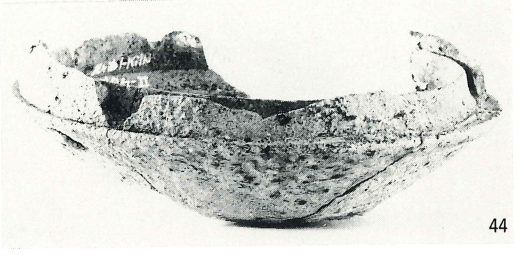
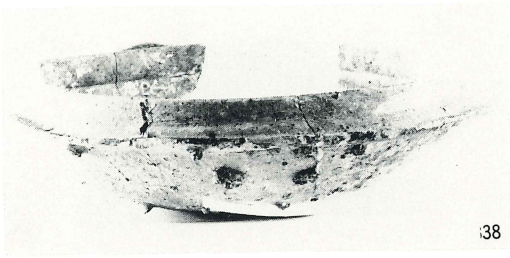
36

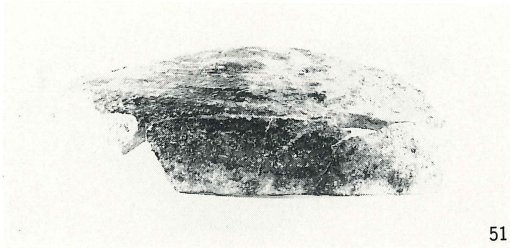


31

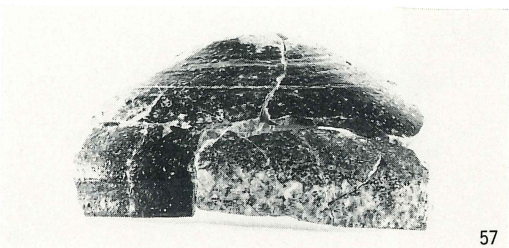


37

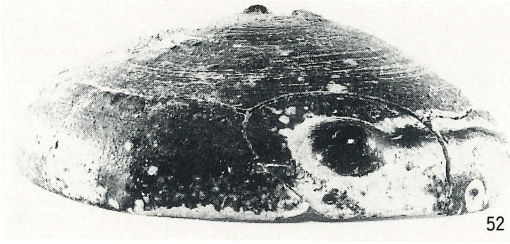




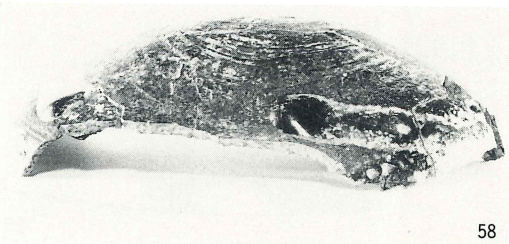
51



57



52



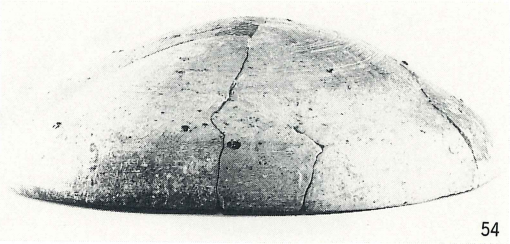
58



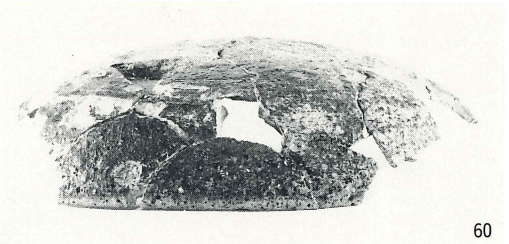
53



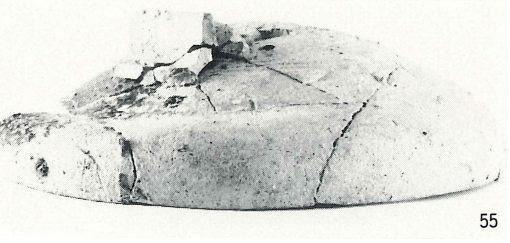
59



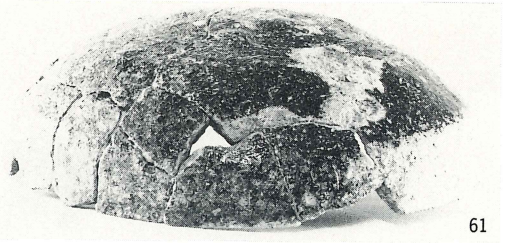
54



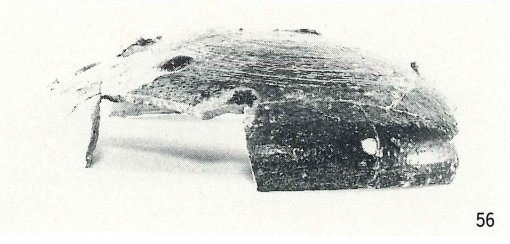
60



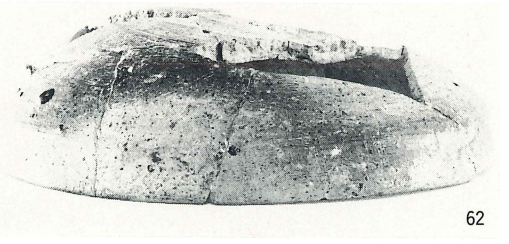
55



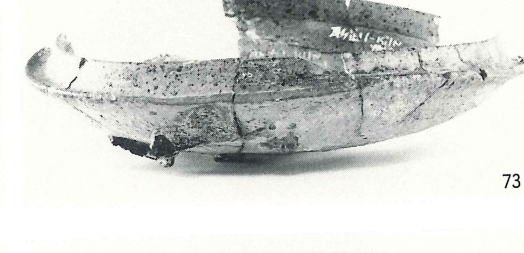
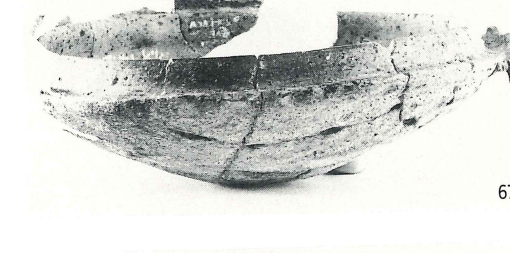
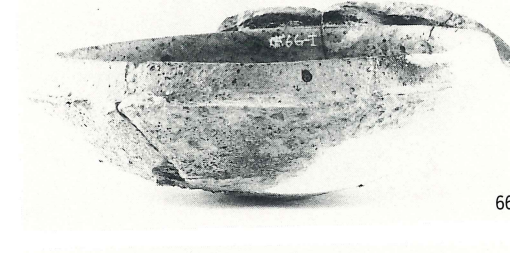
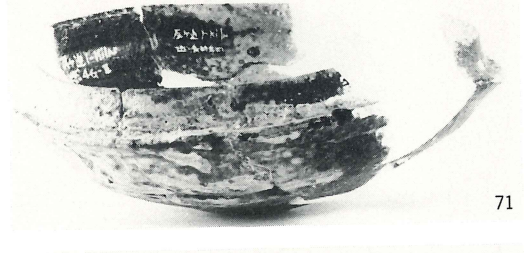
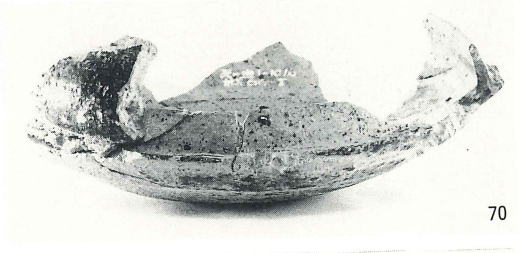
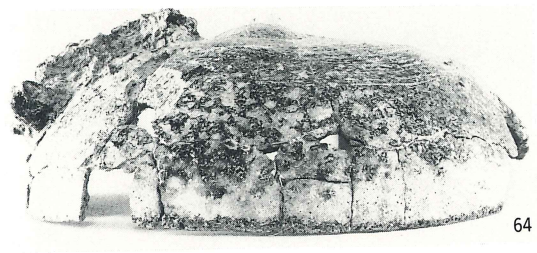
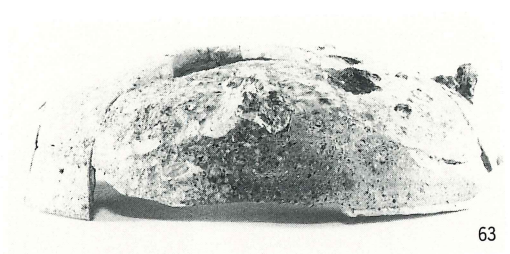
61

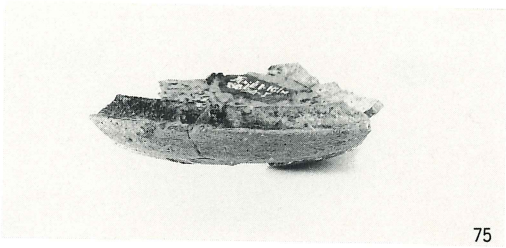


56



62

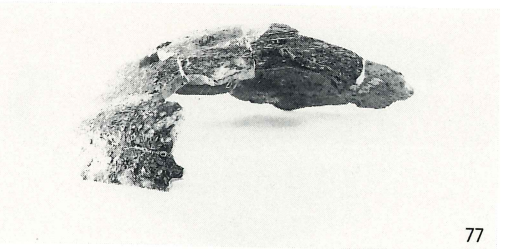




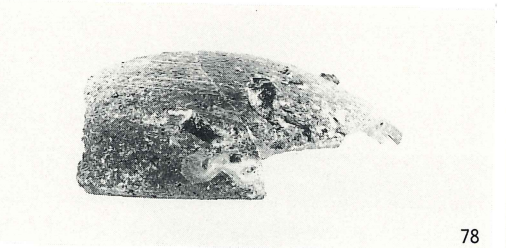
75



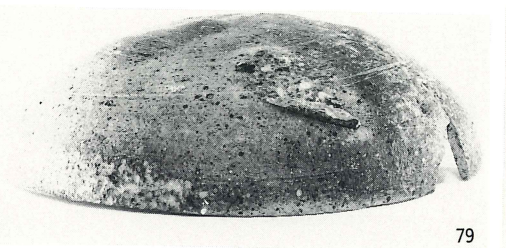
76



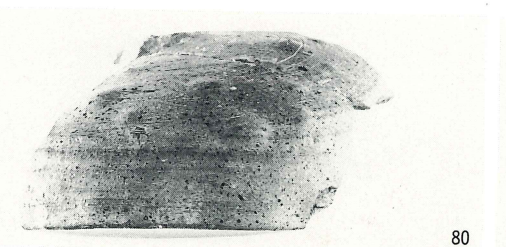
77



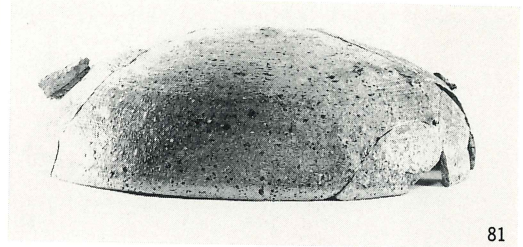
78



79



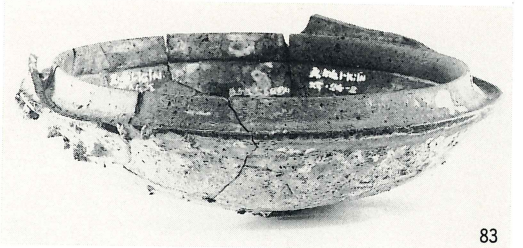
80



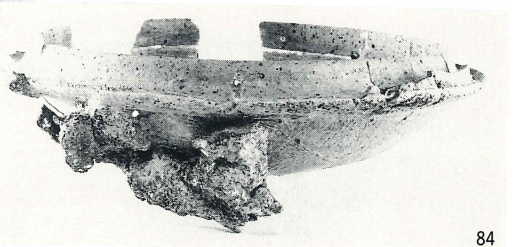
81



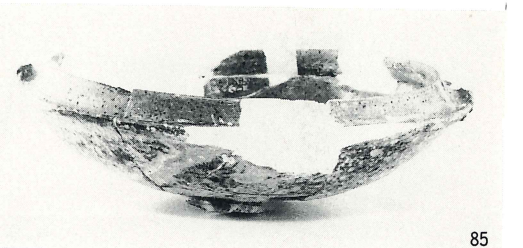
82



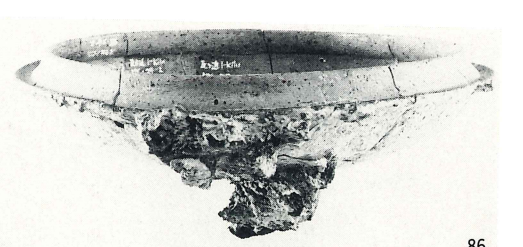
83



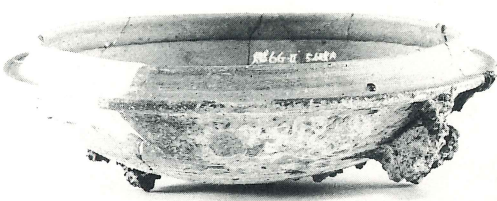
84



85



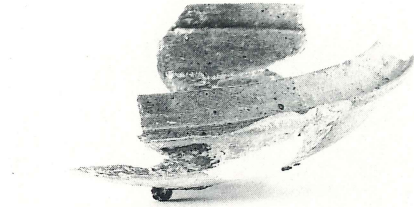
86



88



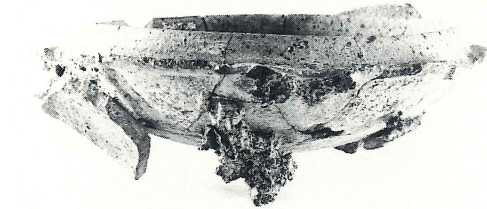
95



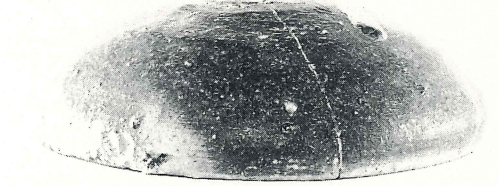
89



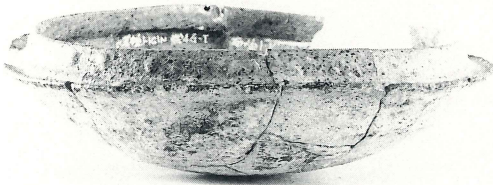
96



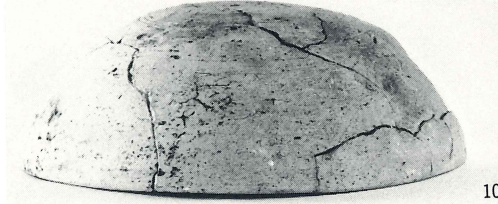
90



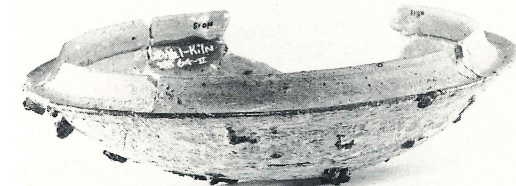
98



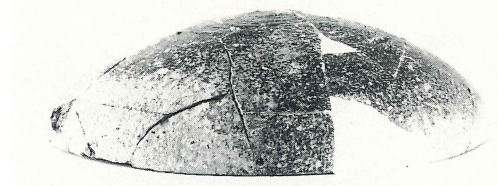
92



100



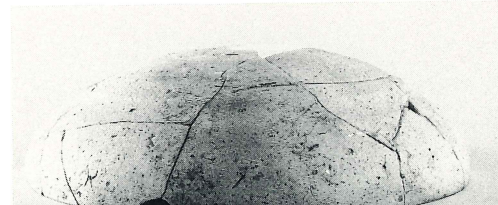
93



101



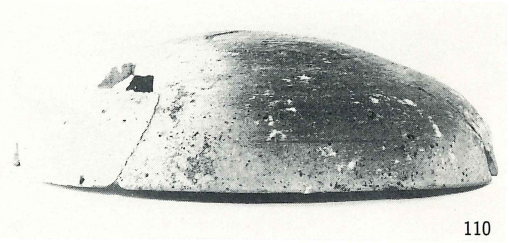
94



102



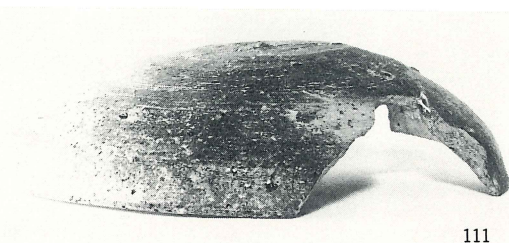
103



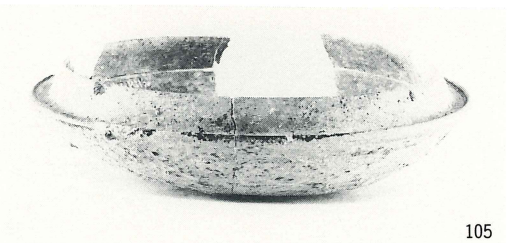
110



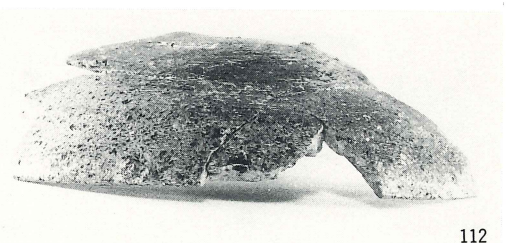
104



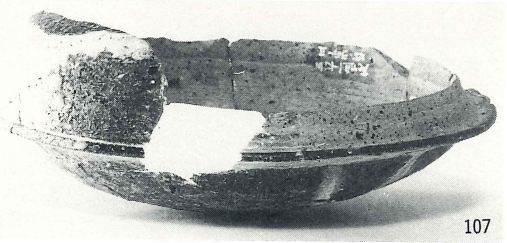
111



105



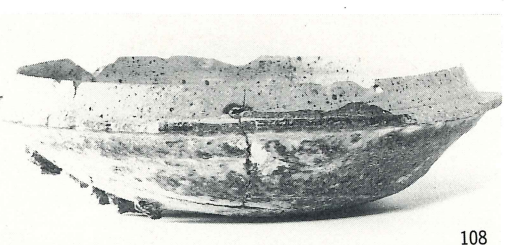
112



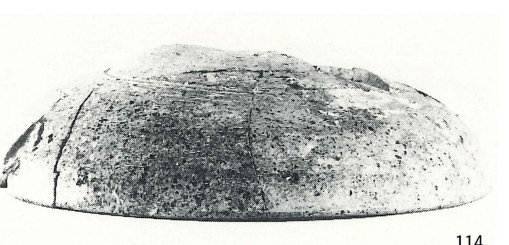
107



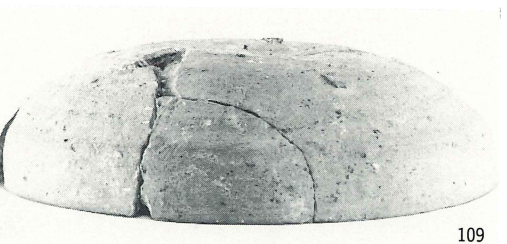
113



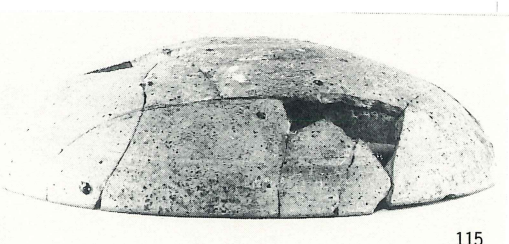
108



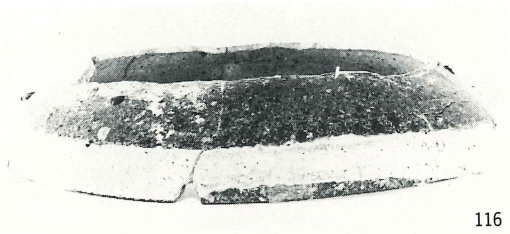
114



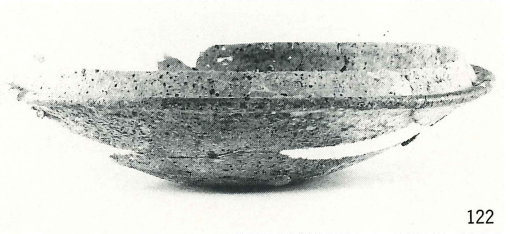
109



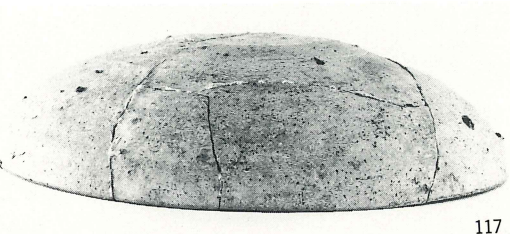
115



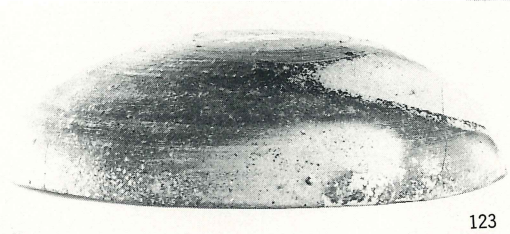
116



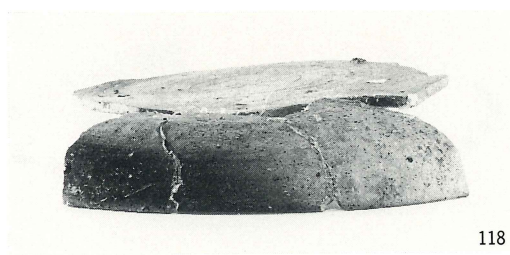
122



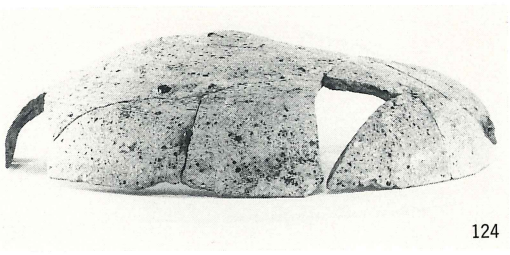
117



123



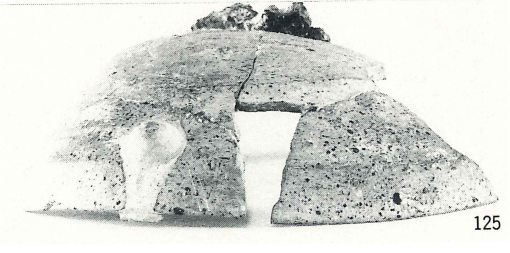
118



124



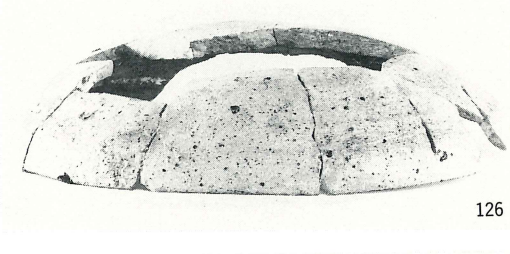
119



125



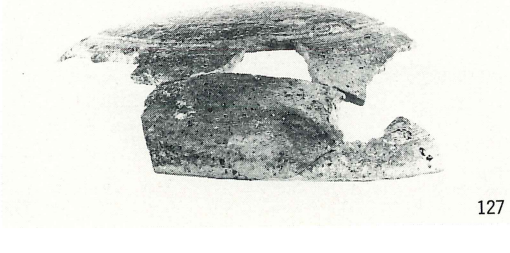
120



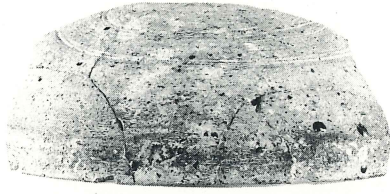
126



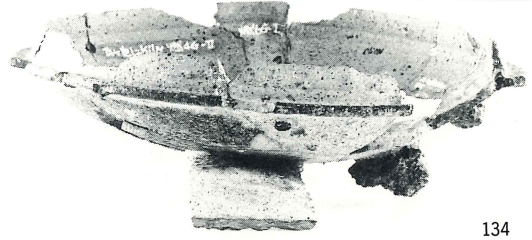
121



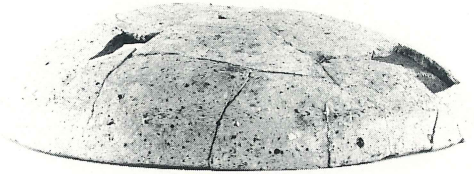
127



128



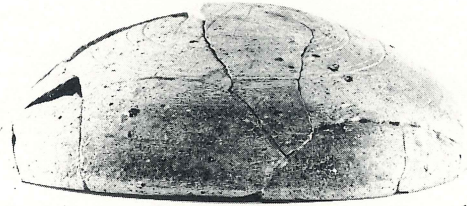
134



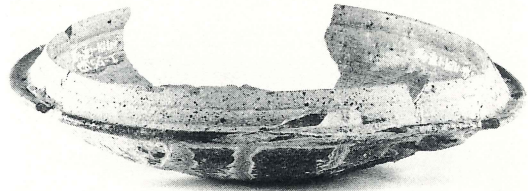
129



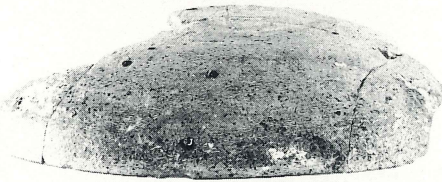
135



130



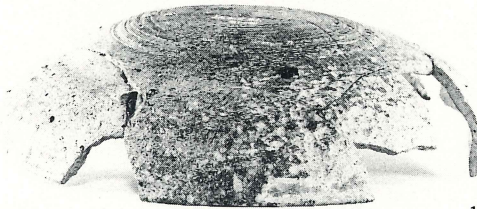
136



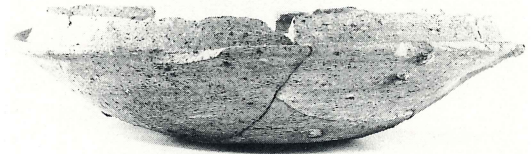
131



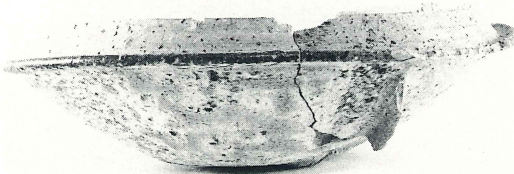
137



132



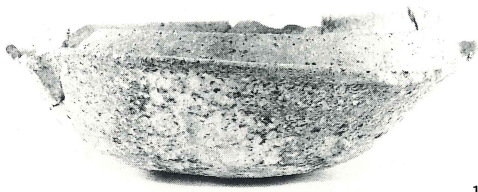
138



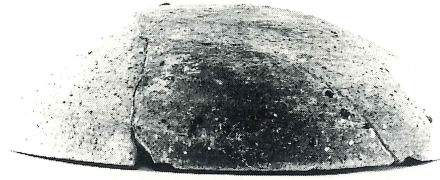
133



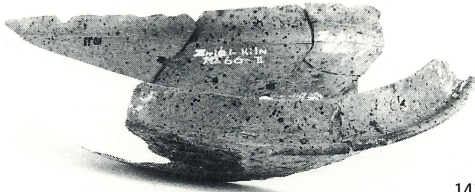
139



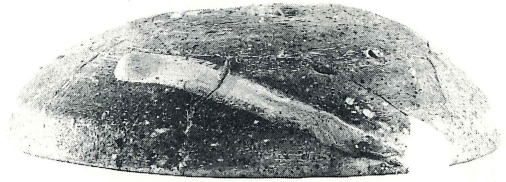
140



147



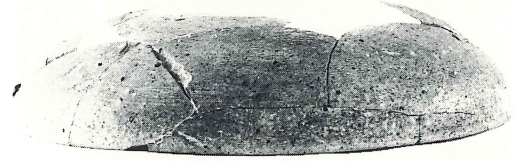
141



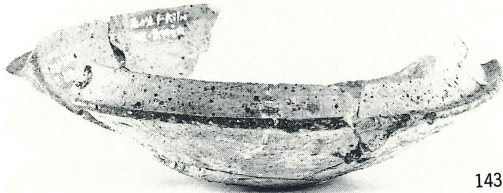
148



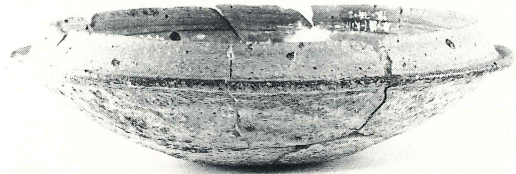
142



149



143



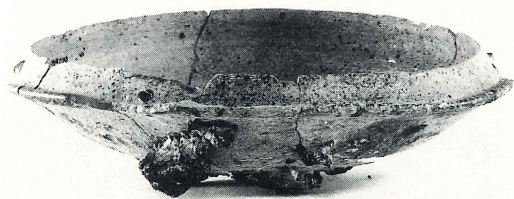
150



144



151



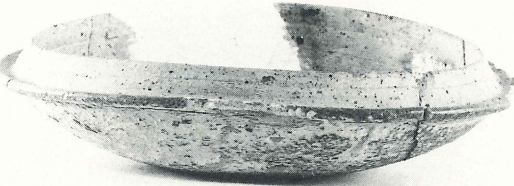
145



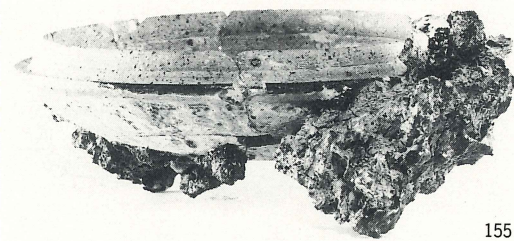
152



153



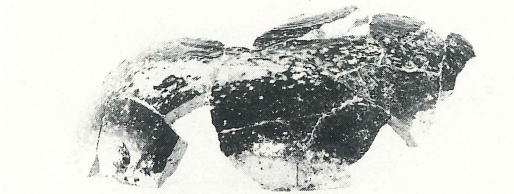
154



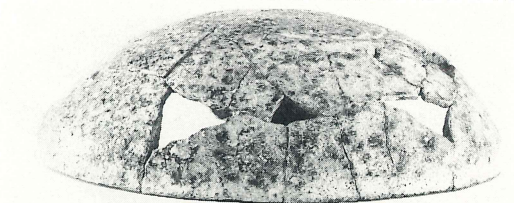
155



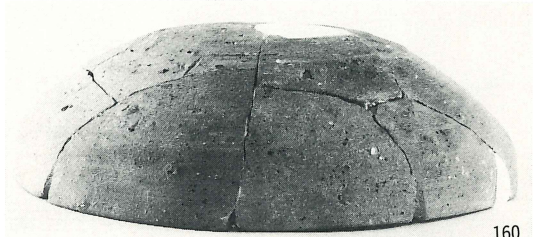
156



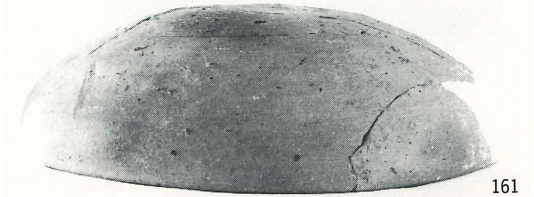
157



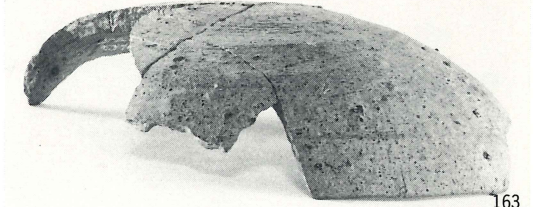
158



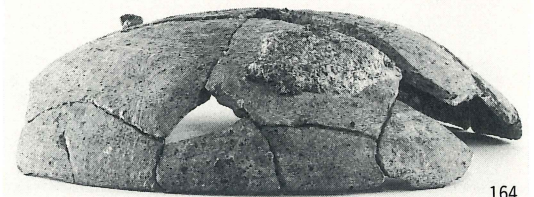
160



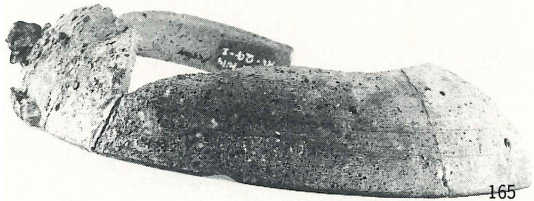
161



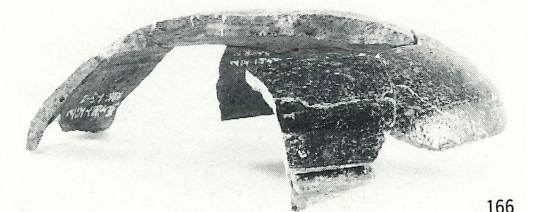
163



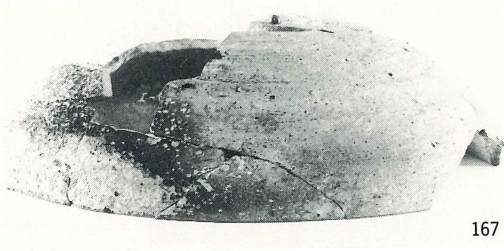
164



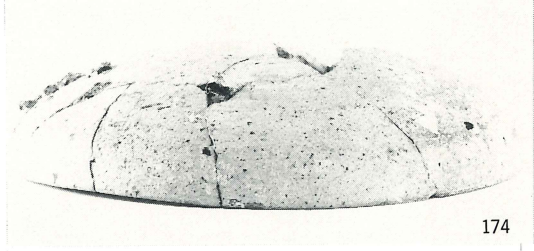
165



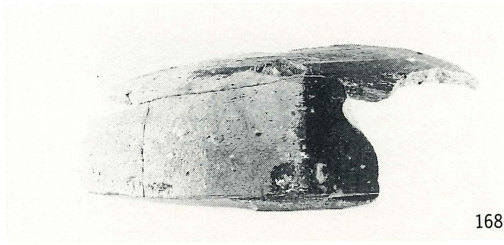
166



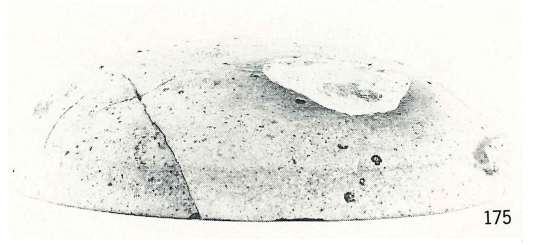
167



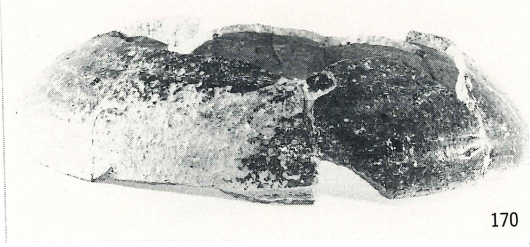
174



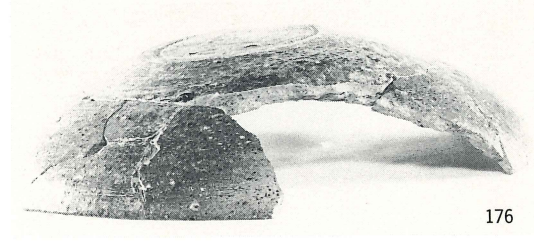
168



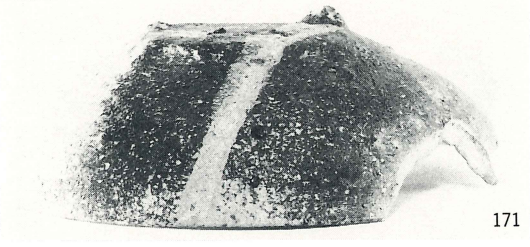
175



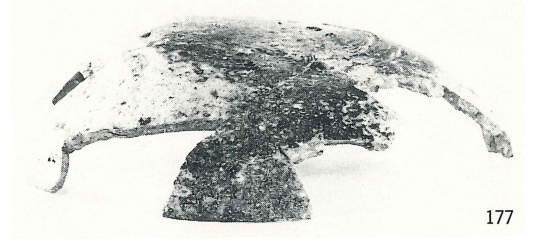
170



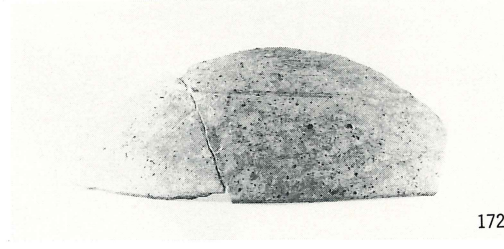
176



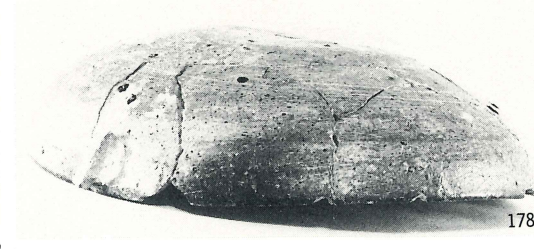
171



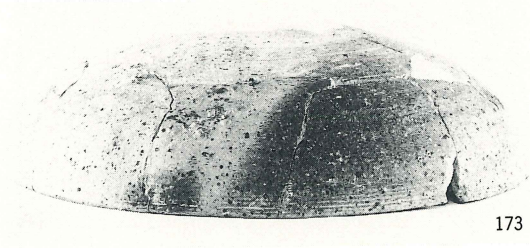
177



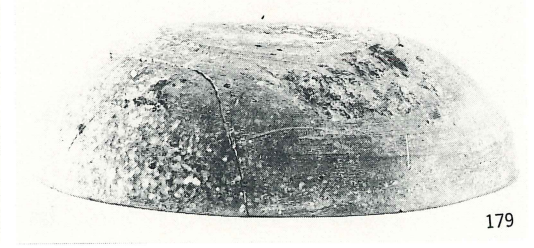
172



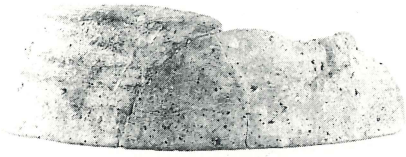
178



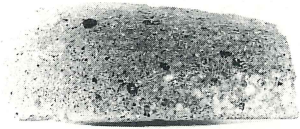
173



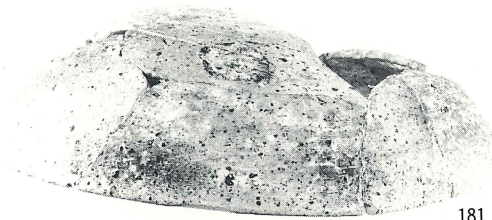
179



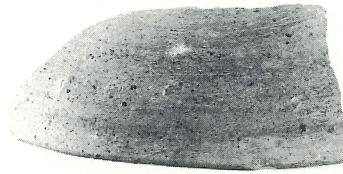
180



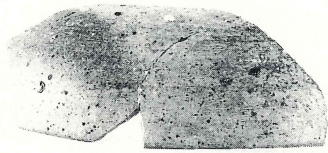
186



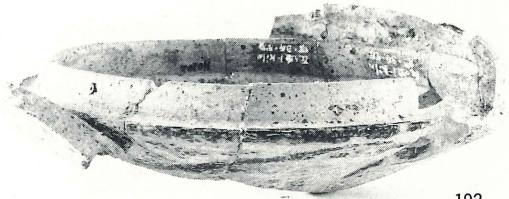
181



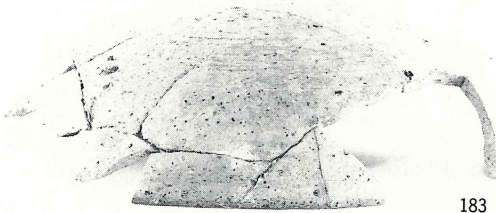
190



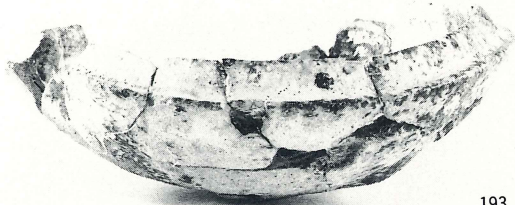
182



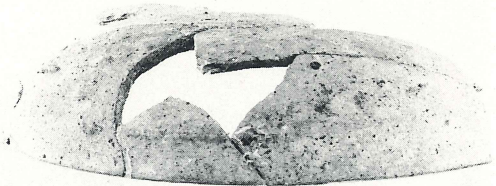
192



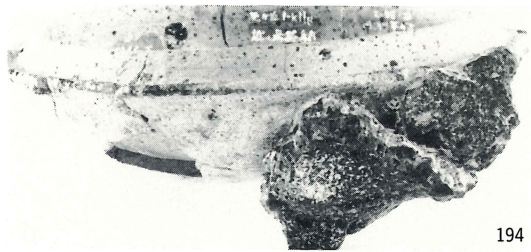
183



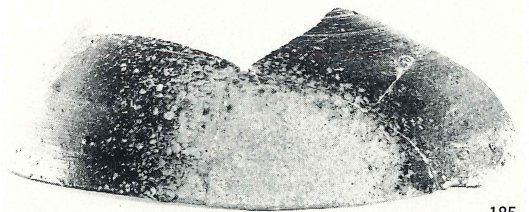
193



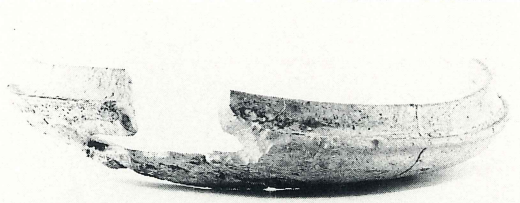
184



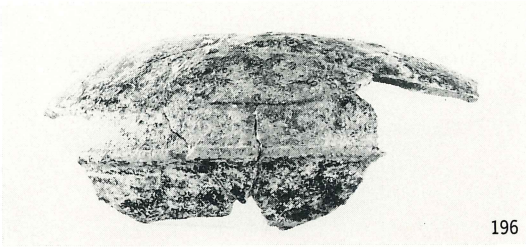
194



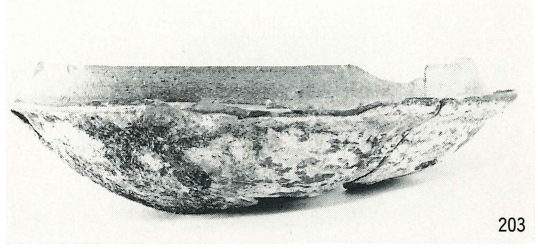
185



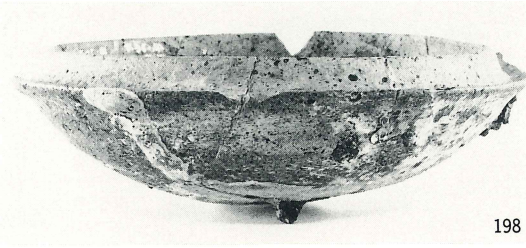
195



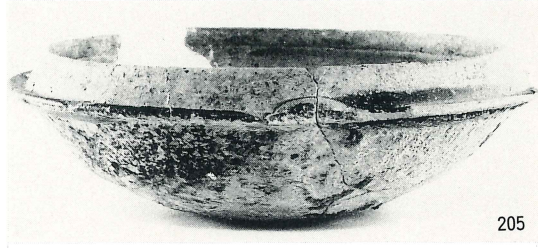
196



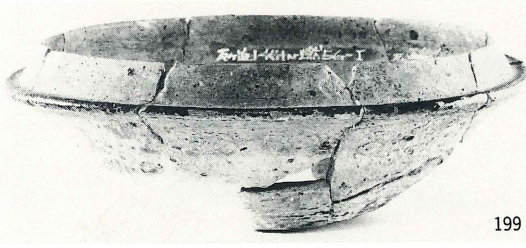
203



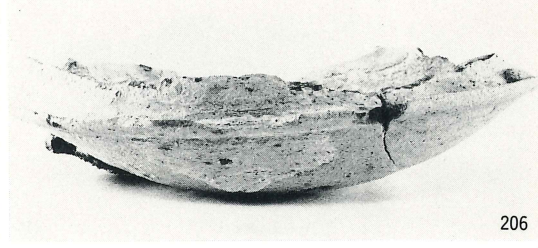
198



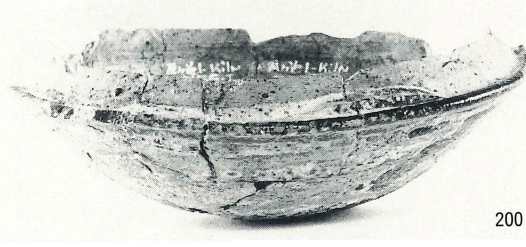
205



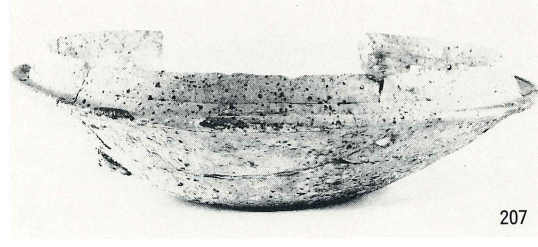
199



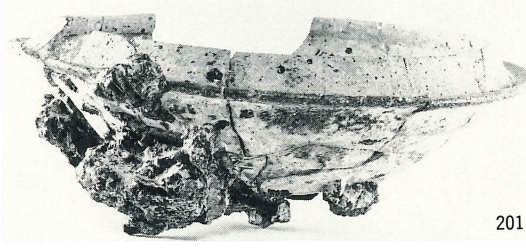
206



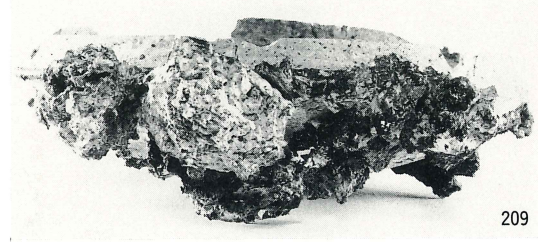
200



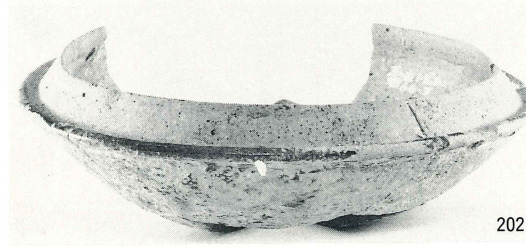
207



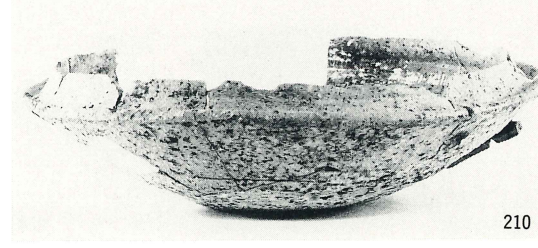
201



209



202



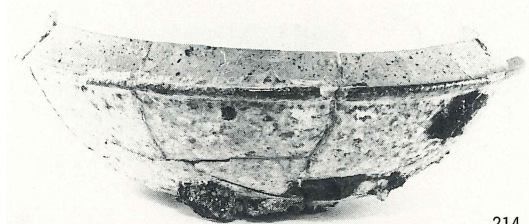
210



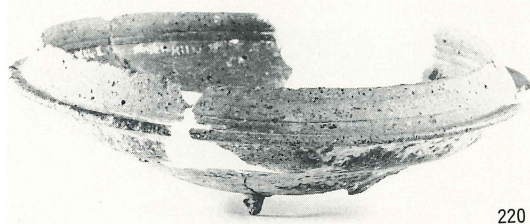
213



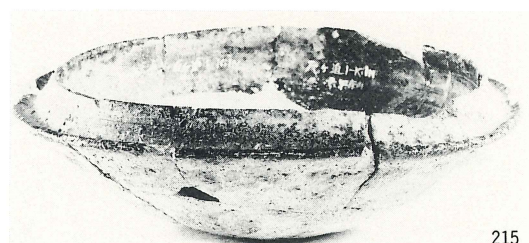
219



214



220



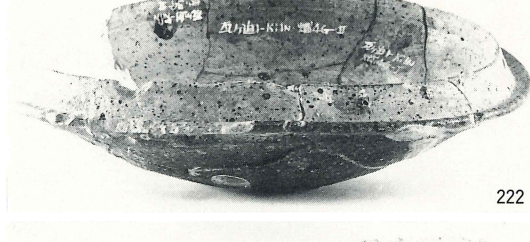
215



221



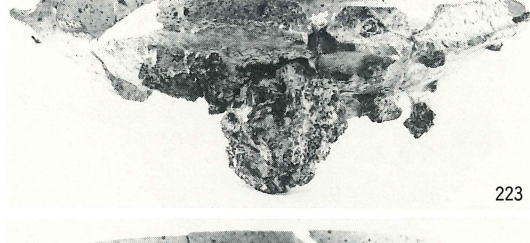
216



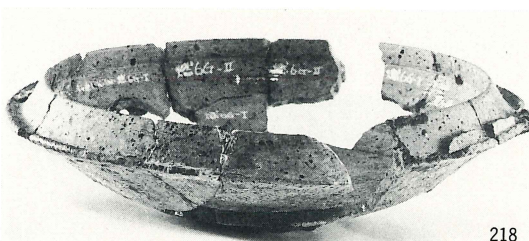
222



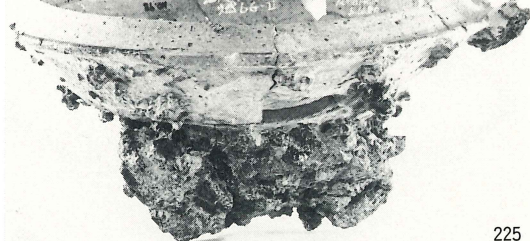
217



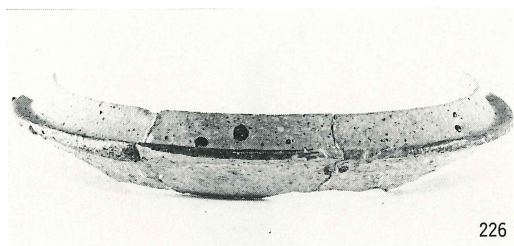
223



218



225



226



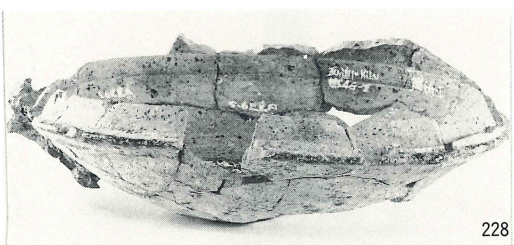
232



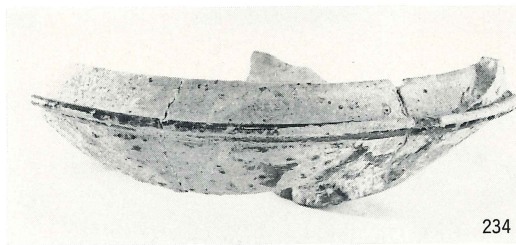
227



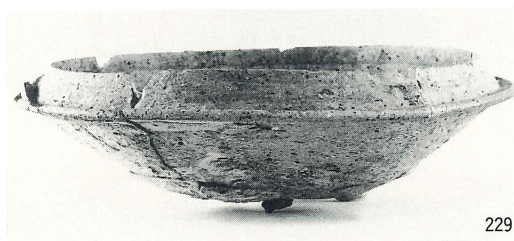
233



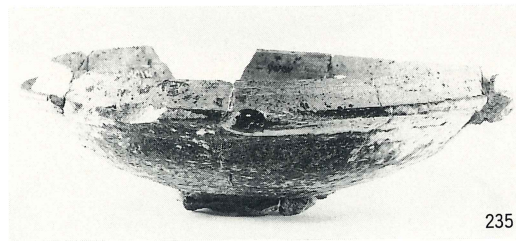
228



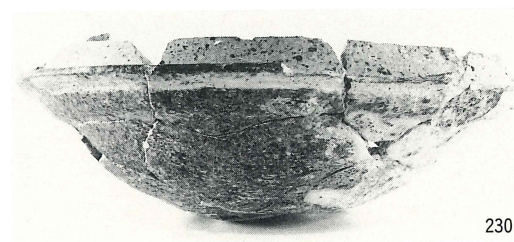
234



229



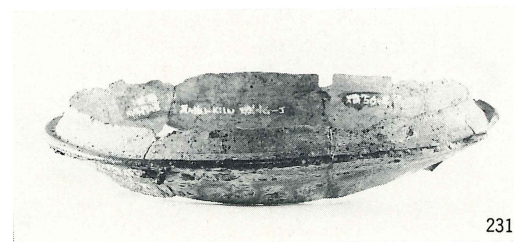
235



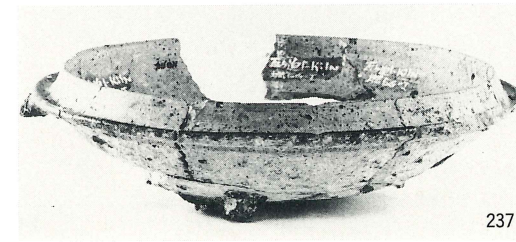
230



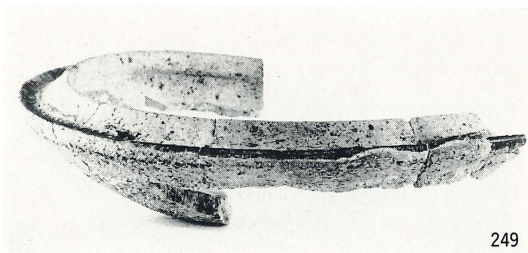
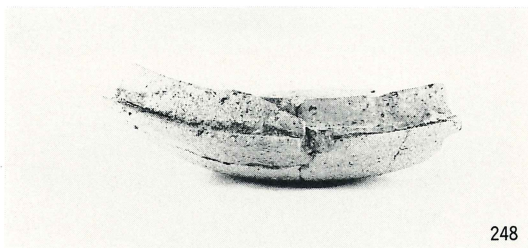
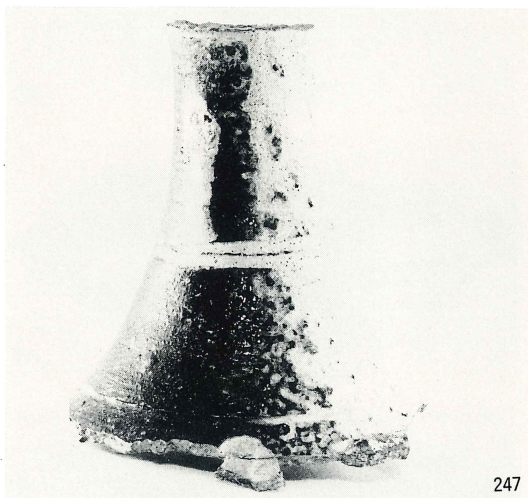
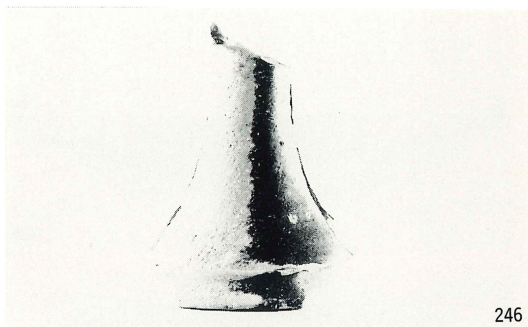
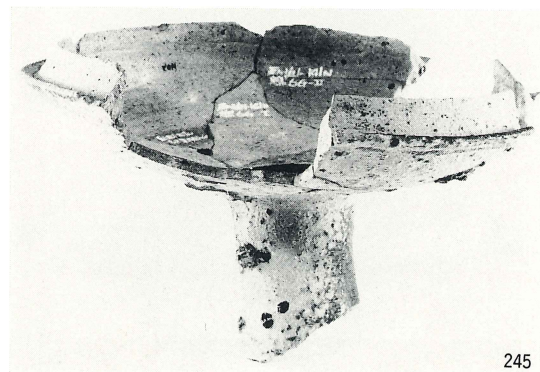
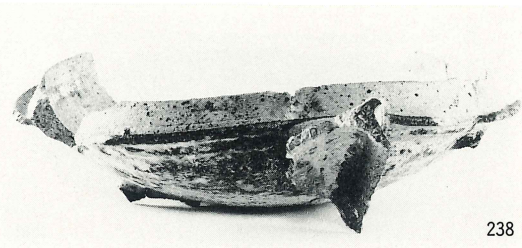
236

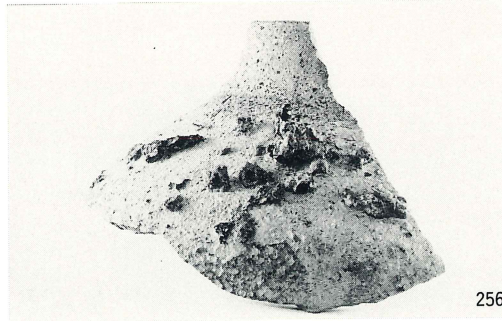
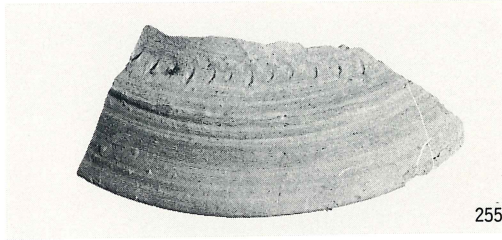
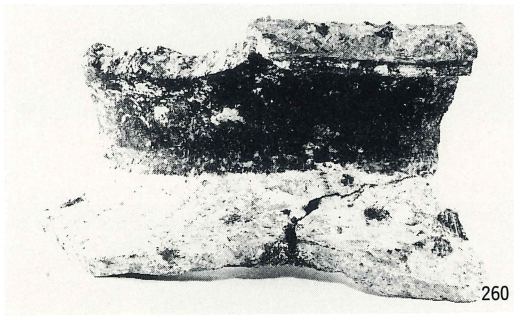
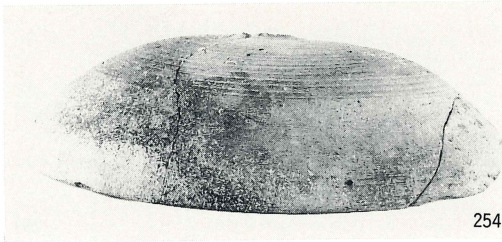
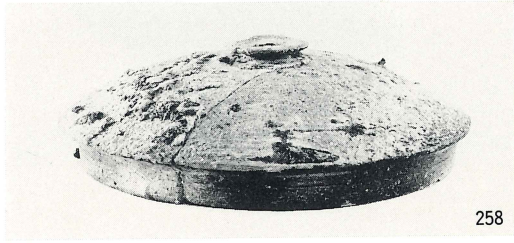
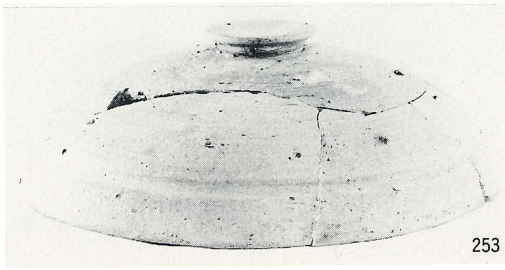
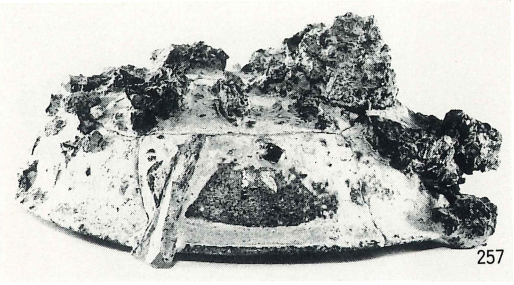
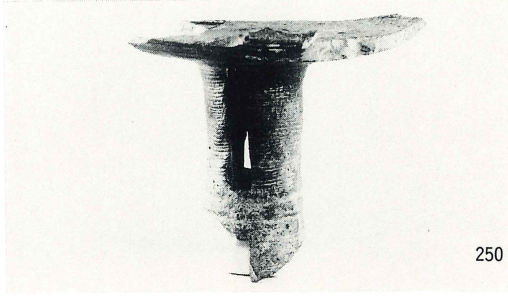


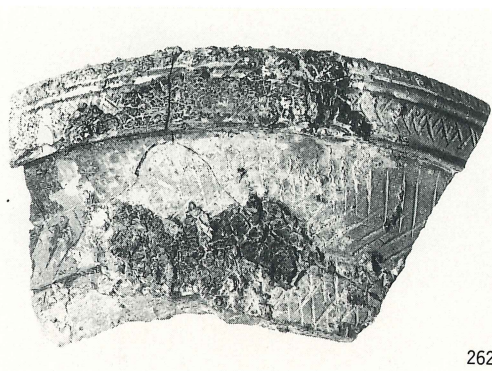
231



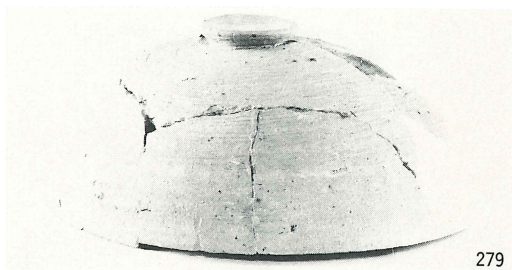
237



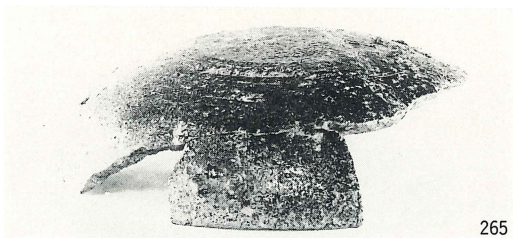




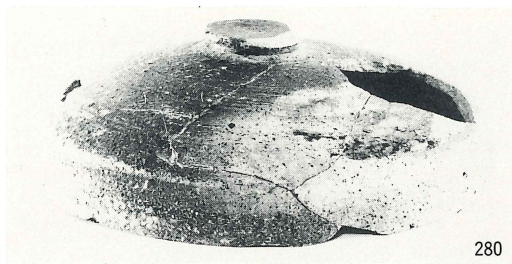
262



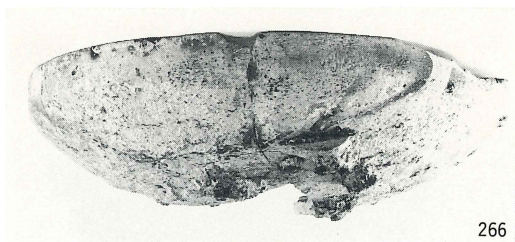
279



265



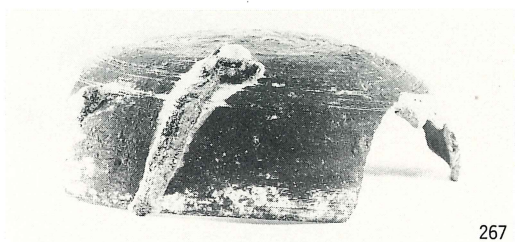
280



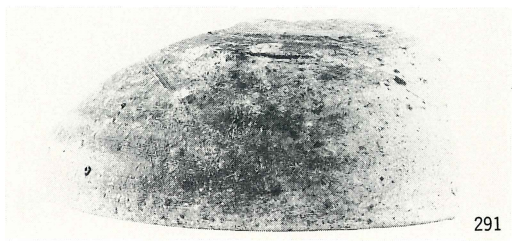
266



285



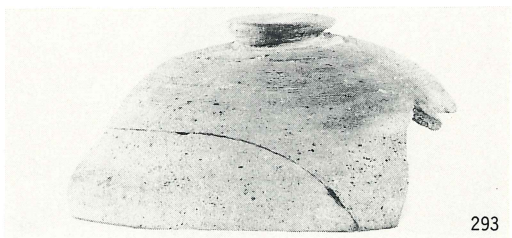
267



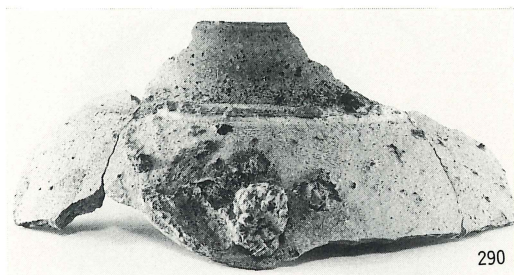
291



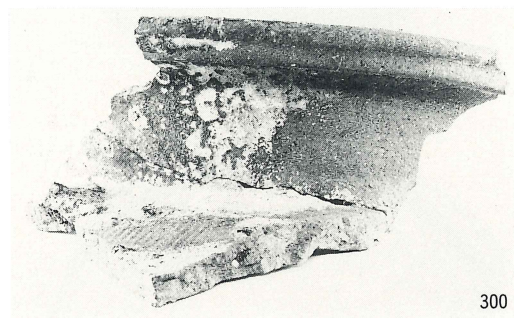
270



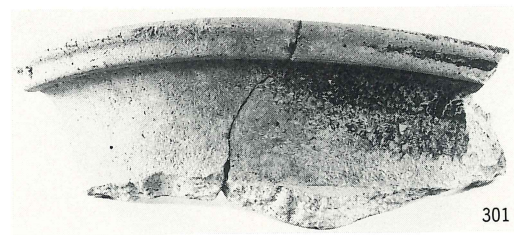
293



290



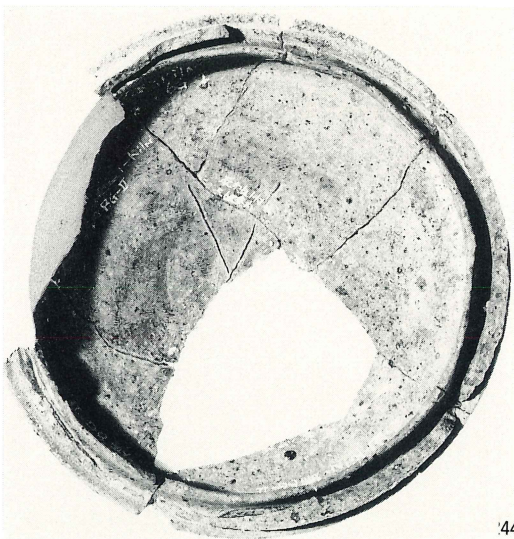
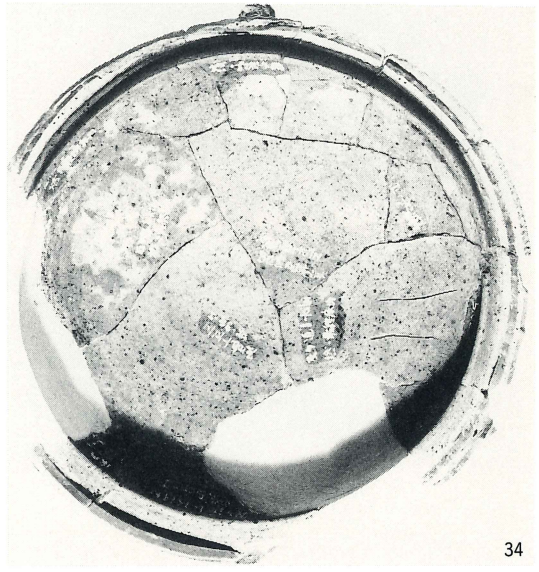
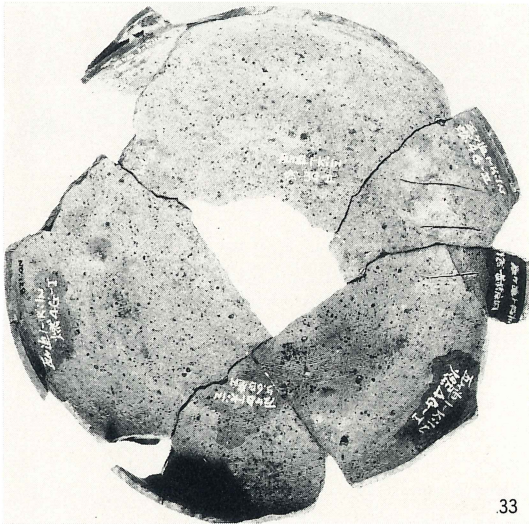
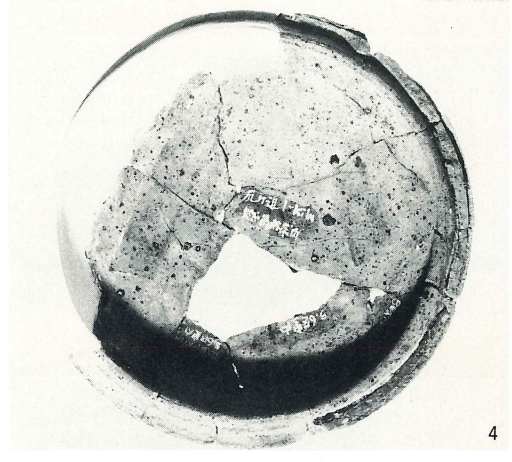
300

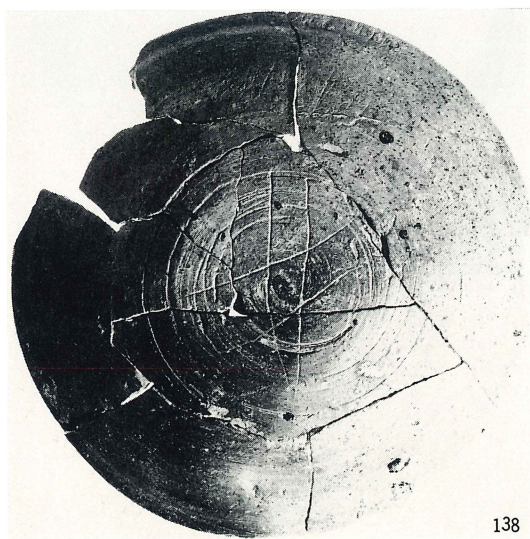
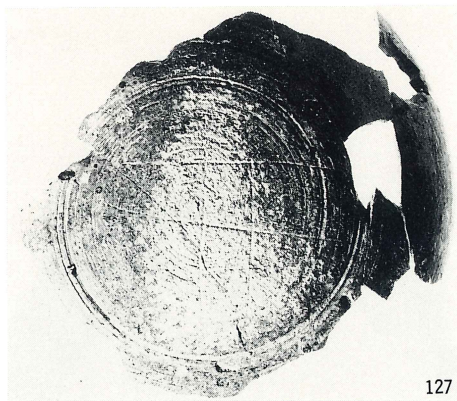
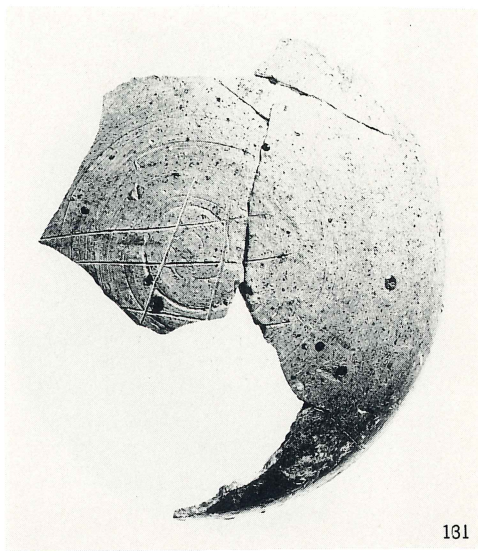


301



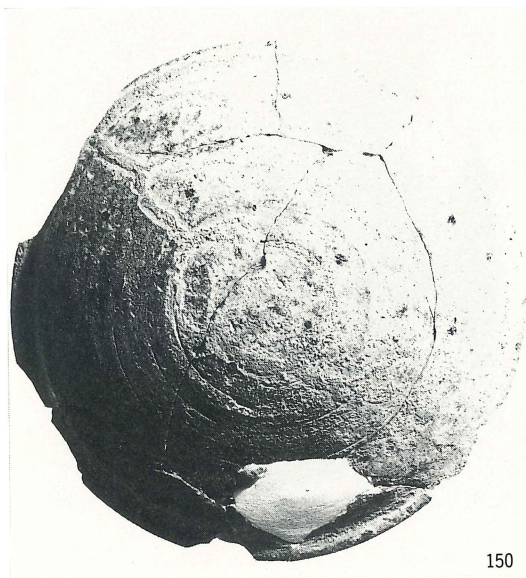
303



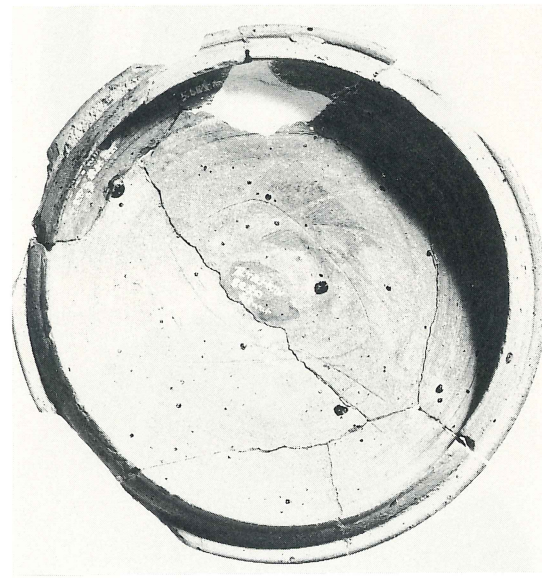




147



150



REPORT ON THE ARCHAEOLOGICAL RESEARCH
REQUIRED BEFORE THE CONSTRUCTION
THE NAKATSU BYPASS

ITODA KILNS

A REPORT OF THE EXCAVATION
OF ANCIENT SUE POTTERY KILNS
IN OITA JAPAN

CONTENTS

- I Progress of research work
 - II Geographical and historical environment
 - III Excavation of kilns
 - IV Study of kilns and relics
 - V Natural scientific study
 - VI Conclusions
- English Summary

OITA PREFECTURAL BOARD OF EDUCATION

1992

SUMMARY

This report is a resurvt of the invetigation required prior to the construction of the Nakatsu Bypass.

Location of the kiln site.

Most of the ancient kilns in Kyushu are located in Northern Kyushu.

There are many reports of excavation of kilns. These reports supplied many clues for understanding the production methods of Sue pottery and roof tiles. However, these Itoda Kiln groupings are located further south in Eastern Kyushu. The excavated area is on sides of a slope. Due to road construction the excavated area is long and narrow.

Three Kiln Sites were discoverd and are reported on in this paper. viz, The Kusaba kiln site, The Yonaki kiln site, and The Kawaragasako kiln site.

The Kusaba Kiln Site : Located in Hokinoue was constructed on a gentle southern slope is an "underground slope kiln" which is common in the Itoda remains. The length is 11.6 meters, width is 1.3 meters. In the floor of the firing area is a pit, called in Japanese Funazokojo (shape of a ship). We thought this might have been used to dump the left over clay scraps, thus keeping the kiln floor clean. An "Ash Dump" site was found near this kiln containing ashes and discarded Sue pottery. Relics were found inside and around the "dump site" .

Relics found : Small size fancy bowl with fitted cover, footed (tall) bowl and a server. Middle size-jar, and hanging bottle ; Large size-pot. In Japanese these Sue pottery items are called : Tsuki, Takatsuki, Hasou, Tubo, Sagebe, Kame. Among the "tsuki" (Fancy Bowls) we noticed changes in shape and production. Simillar changes were found in other Sue pottery. These Sue pottery relics date from the late to end of the sixth century and correspond to TK209 in the Chronorogical Sequence of Kinai Sueki Hennen kusaba type.

Yonaki Kiln Site : Located in Hokinoue, it was constructed on a western slope. The front was almost completely destroyed due to cultivation. The only part left is the rear fire door environs. This is also an underground slope kiln. The remaining part of the kiln is 1.2 meters in length by 0.4 meters in width. This seems to be a very small size. No relics were found inside. But a few relics were found in the Ash Dump Site. We found some Sue pottery, viz, bowl with fitted cover, cup, jar, horizontal jar. There were two types of bowls, one an old type and the other newer, dating from the early seventh century. The Sue pottery made from the early seventh century correspond to TK209 in the Chronological Sequence of Kinai Sueki Hennen Yonaki Type.

Kawaragasako Kiln Site : Located in Itoda, it was constructed on a north side slope of a slightly elevated hill. It is an underground slope kiln of the same type as the Kusaba kiln. It is about 12 meters long, and 1.7 meters wide. It is longer than the Kusaba kiln and also narrow. An Ash Dump Site was found near this kiln with some pottery in it. Sue Pottery – Small size : a bowl with fitted cover, pedestal bowl, server ; Middle size : jar, and hanging bottle ; Large size : pot. The bowl with the fitted cover is a newer form with some of the old elements in its shape. Other types of pottery were also simplified. The pottery corresponds to TK43 in the Chronological Sequence of Kinai Sueki Hennen Kawaragasako Type.

Luckily we found three types Sue pottery which continuously changed in Chronological Sequence (TK43 → TK209 → TK217). The fact that much of the Sue pottery was found inside the kilns points to their being gathered together. The Spatula markings or symbols found on the bowls in the Kawaragasako Kiln site are characteristic and have been scraped on the surface of inner, outer, or double-sided bowls. This could be an indication of the need to search for kilns with pottery having these “hera-kigou” or spatula markings. Sue pottery is a key in dating sites and relics. One reason for this is that Sue pottery is found in most areas of Japan. They cover a wide area. The shapes of the Sue pottery kilns in Itoda are no different from those found in Kyushu and Kinai.

The technique of making Sue pottery was imported from Korea in the middle of the fifth century. Sue pottery was baked at temperatures exceeding 1000 degrees celsius. A high level of skill was required for kiln produced pottery. The acceptance of the technique in each region shows the extent of this art.

We believe that what is contained in this report can be of use in the study of social behavior and characteristics of groups of earthenware craftsman in this area at this period.

中津バイパス埋蔵文化財発掘調査報告書(4)

平成4年3月28日 印刷

平成4年3月30日 発行

編集 大分県教育庁管理部文化課

発行 大分県教育委員会

〒870 大分市府内町3-10-1

印刷 佐伯印刷株式会社
