Summary

The objective of rice milling is to remove the hull, bran, and germ with minimum breakage of the starchy endosperm. There are two stages in rice milling, the first being dehulling and the second whitening. The Engleberg huller, under- run disk sheller and the rubber- roll husker are the principal machines used in dehulling. After husking, the paddy and products are separated. The first stage is to remove the light weight husk in a current of air. The second is to separate brown rice from unhusked paddy by a paddy separator. When this hull is removed, the kernel or caryopsis, comprising the pericarp (outer bran) and the seed proper (inner bran, endosperm and germ), is known as brown rice. Brown rice is then polished by abrasion (e.g., cylinder or cone) or self- abrasion (e.g., modified Engleberg huller). The purified endosperms are marketed as white rice or polished rice. Rice husk is used as a fuel, as a substrate for growing mushrooms and as a feed for live stock. Because the husk ash is almost pure silica, its use in glass and ceramics manufacture is being developed. Bran is a potential source of vegetable oil. It is also being used as feed for poultry and live stock. Rice brokens can be used in the manufacture of pasta, and fermented products.