Manual or mechanical removal of the mucilage surrounding the cocoa beans can be done manually or mechanically. The mechanical process, however, requires special machinery that may be too expensive for traditional cocoa farmers in third world countries.

Conversely, the mucilaginous pulp of cocoa bean contains sugary compounds such as glucose, fructose, sucrose, and pentose, which could be good substrates for microbial growth. Indeed, during the cocoa bean fermentation process, a number of particular microorganisms secrete pectinolytic enzymes that break the chemical structure of the mucilage, resulting in the chemical removal of the pulp or drainage of the mucilage.

Reportedly, yeast plays a significant role in the pulp degradation process. In fact, cocoa pulp can be readily fermented by yeasts such as *Saccharomyces cerevisiae*. Yeasts have been reported to play a significant role in the pulp degradation process. In fact, cocoa pulp can be readily fermented by yeasts such as *Saccharomyces cerevisiae*, and yeasts have been reported to have the pectinolytic activity. Yeast is also suggested to decrease pulp and bean acidity through the utilization of citric acid. The secondary products of yeast metabolism (e.g., organic acid, aldehydes, ketones, higher alcohols, and esters) and glycosidase production are likely to be significant and should impact the quality of the beans and chocolate. However, this potential impact remains understudied.

Improving the quality of the fermentation process has been researched and studied elsewhere previously. Kustyawat studied the use of mixed starter cultures, including a mixed *S. cerevisiae, Lactobacillus lactis*, and *Acetobacter aceti*. Away studied the effect of addition of starter cultures of *Saccharomyces, Acetobacter, Lactobacillus*, and *Streptococcus*.