Grain Huller for Rice, Spelt, Wheat, Oats, Millet, and Sesame

The two main components of the grain huller are a Corona Mill and a rubber-faced disk made from:

- A rubber disk
- A steel washer for mounting the rubber disk on the hand mill
- Cyanoacrylate glue (Super Glue) to attach the rubber disk onto the steel washer

The stationary disk (A) is removed and replaced by a rubber-faced disk (B). By turning the auger handle (C); grains are pressed between the rubber-faced disk (B); and rotating disk (D); and then rolled out. The soft rubber disk allows the hulls to be removed with minimal damage to the kernels. Natural (gum) rubber is used for the rubber disk because it has better abrasion resistance than synthetic rubber.

Short grain rice can be hulled at a rate of about ½ pound per minute. The percentage of rice hulled varies from 75 to 99% depending on the rice cultivars, the spacing between the stationary rubber disk and the rotating abrasive disk, and uniformity of spacing between the disks.

The grain huller also hulls spelt, wheat, oats, millet, and sesame. To "wet" hull sesame, soak the seeds in 1% (w: v) lye (sodium hydroxide) solution for 10 seconds to 5 minutes, then rinse with water and 1% solution of acetic acid.

Hand operated grain huller: A) stationary disk, B) rubber disk, C) handle and D) rotating disk with auger. Remove stationary disk and replace with rubber-faced disk.

Although this modification has been tested on the Corona Mill, it is not supported by the manufacturer.