

## Chapter 2: Hybrid Corn and Popcorn Properties

The Popcorn that is grown today is almost always a Hybrid. Hybrids are the result of two or more basic types of corn that are combined to obtain or exaggerate certain desirable characteristics.

### **Hybrid Selection**

Within the popcorn family there are many different hybrids. These are obtained by cross breeding different strains of popcorn to emphasize specific characteristics in the corn after it is popped. Some of these characteristics are:

- \* kernel size
- \* kernel shape
- \* kernel texture

There are several varieties or Hybrids of commercially available popcorn, the primary groups are, yellow and white. There are also some novelty products such as black and miniature popcorn.

Yellow popcorn is the most common used for commercial applications. The kernels are rounded in shape and have a medium brown color. Within this group there are several options available to the buyer. Kernel sizes are defined as small, medium, and large. The shape of the popped kernel is also affected by hybrid. Most corn when it pops takes on an irregular shape and is referred to as "Flake" popcorn. Other hybrids take on a more rounded shape and are referred to as "Ball", or "Mushroom" corn.

White popcorn is a small white grain that looks similar to a grain of rice. Some specific hybrids use the names "Baby Rice", "Japanese Hulless", or "White Hulless". The pericarp on this grain is thinner than other hybrids and when popped is not as noticeable when eaten. When this hybrid is popped the popped kernels are very white, small in size and very tender. Due the fact that this hybrid is so tender and fragile it is used almost exclusively in the home. When used in commercial applications there is excessive breakage.

Flake corn is used in most applications and Mushroom is used for the production of sugar coated or caramel corn. The Mushroom kernels have fewer small protrusions to break off in the relatively rough handling that occurs in the caramel coating process

### **"Hull-Less" Popcorn**

Hull Less popcorn is not true popcorn. Hull-Less popcorn is usually produced using a conventional corn meal extruder and altering the shape of the product to resemble the irregular popcorn kernel. The extruded product is then coated with oil or Caramel and marketed as "Hull Less" Popcorn.