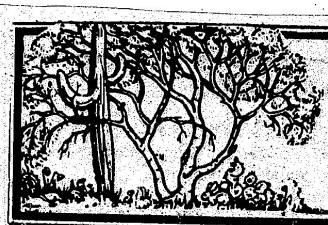

a desert place

Natural beauty through preservation

9/16/92

Throughout the summer, the Sentinel is publishing its popular "A Desert Place" columns from 1987. The columns were provided by members of the Cave Creek Improvement Association's Desert Awareness Committee.

By GLADYS NISBET

This article is an attempt to describe the characteristics of yucca, agave and aloe plants and to distinguish them from the other.

Yucca and agave are native genera to North and Central America with a few species in northern South America. Aloe is a plant that originated in Africa.

Of the hundreds of known species of yucca and agaves, only a few are native to Arizona.

Many yucca and agave plants used in landscaping are not native to Arizona, therefore, some of the descriptions may not apply to them.

Aloes, yuccas and agaves all grow from underground stems and produce rosettes of leaves.

This may be one of the chief reasons they are frequently confused.

Of these three groups of plants, only yuccas are the ones that produce trunks, and only certain species have this characteristic.

Aloes, yuccas and agaves produce sprially-arranged leaves in rosettes.

The flower stalks of yuccas and agaves always grow from the centers of the rosettes.

The aloe flower stalks rise from the sides of the rosettes, never the centers.

Thus, each aloe plant may produce more than one flower stalk from each rosette, but yucca and agave plants are limited to one stalk from each rosette. In some species of yuccas, the stalk or trunk may branch.

The leaves of these three genera of plants have several outstanding differences.

The aloe is a very succulent plant. Break off a small piece of the leaf, look closely and you can see the moisture oozing from the delicate water-storing cells.

The agave is considered a succulent, but many of the species are rather poor representatives of the succulent plants.

Yuccas are not succulents. Both yuccas and agaves are very fibrous plants.

Most yuccas have loose fibers along the margins of the leaves that resemble whitish threads. This may also be true of those agaves that have narrow leaves.

Aloes do not have pronounced fibers in their leaves nor thread-like fibers along their margins.

They do have teeth along their margins and a sharp point at the tip, but they're not spines.

Yucca leaves do sometimes have very small teeth on the margins, especially on the lower half of the margins.

Agave leaves often have teeth on the margins which, in many species, are spines. The tips of both yucca and agave leaves are sharp-pointed.

The agave leaf tip is always a spine from a half to 2 inches long. Some yucca leaves have spines at the tip, but many, while pointed, are not spines.

There is so much variation in the measurements of length and width of leaves in these three groups that giving such measurements would be meaningless.

Aloes, as succulents, have thick leaves; the agaves vary, but are never flat; and the yucca leaves are flat or somewhat cupped.

Agave flowers are similar to the yuccas, but smaller, greenish, whitish or pink.