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Welcome to the Wonderful World of Bromeliads

The first bromeliad to be discovered and introduced into cultivation was the pineapple, about 500 years ago, which was discovered by Columbus in the West Indies and taken back to Spain. Within 50 years it was being grown in India and other warm countries. Over the next 400 years a few more species were discovered and found their way into royal botanical gardens or the private greenhouses of wealthy Europeans. It is only in the last 100 years that they have been widely used as ornamentals and cultivated for the masses. New species are still being discovered and plant breeders are developing stunning new hybrids to choose from.

The pineapple is the only bromeliad cultivated for food. Its stems contain a protein digesting enzyme called bromelain which is used as a meat tenderizer. Since fruit also contains bromelain, it cannot be used in Jell-O as it will prevent congealing proteins from setting up. The Spanish moss (*Tillandsia usneoides*) has been used for stuffing upholstery and packing. *Neoglaziovia*, a more obscure species is grown as fiber.

To understand how to grow a plant, we need to know where they come from and how they grow in nature. Bromeliads are a new world plant growing in the tropics and sub-tropics of the Americas. They range from Chile, Argentina to the Southern part of Florida, with the largest amount coming from Brazil. One single species (*pitcairnia*) is found in Western Africa. The range in altitude from sea level to 14,000 feet and can be found in various habitats, from hot dry deserts to wet rain forests and cool mountains.

A relatively small portion of bromeliads, known as terrestrials, prefer to grow in the ground (as most people think plants do) the majority of bromeliads are epiphytic, called epiphytes and grow in trees, shrubs, cactus and other plants or even on telephone poles and telephone wires. The ability to take their moisture and nutrition from the atmosphere is what has earned them the title of "Airplants".

All bromeliads share common characteristics in that they have tiny scales on their leaves called trichomes. These trichomes act as very efficient absorption system, allowing the plant to absorb moisture or to close and prevent water loss in hot dry conditions. In addition the plant absorbs carbon dioxide and releases oxygen through these scales, in its process of photo synthesis. Species from hot arid areas are occasionally so covered with these scales that they appear silvery whit. Species from more humid areas have much smaller, less noticeable scales and sometimes these form patterns and banding which adds to the plants beauty.

All bromeliads have the leaves arranged in a spiral pattern called a “rosette”. The number of leaves and the spacing varies, terrestrials have a wider flatter rosette, with very little water storage, and they rely on their roots for moisture. The Tank or Epiphytic species rely on their ability to store water and their roots primarily for anchoring the plant in place. These roots harden off and become as strong as wire. It is from the center of the rosette that the flower is produced and the stalk can be short (as in Neoregelias) or long (as in Aechmeas and Vrieseas) and may include colorful leaf like appendages called scape bracts, that attract pollinators as well as add to the beauty of the plant.

Bromeliads flower only once. Once they produce a flower they do not continue to grow – but instead all of their energy goes into producing offsets or pups. These plants continue to feed off of the mother plant until they produce roots of their own and can survive as a spate plant. The mother will sometimes survive a generation or two before completely dying off. The pups are usually produced at the base of the plant inside the sheath of a leaf, sometimes on a long stolon or in the case of a pineapple, atop the flower spike. The green leafy top of the pineapple is actually a pup and can be planted and grown.

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