

Lotusland VIP Crossword hints

Across

7. Plants that may be epiphytic (growing on other plants or rocks) or terrestrial (growing in the ground). Many have silvery leaf hairs that reduce transpiration. Others, the tank types, have overlapping leaf bases which act as reservoirs. Most famous bromeliad is the pineapple.
8. A sugar formed in the process of photosynthesis that serves as the energy source (food) for plants.
11. The art or science of growing plants.
14. The official care and protection of natural resources. Habitat destruction (usually by human means) is the biggest threat to both plants and animals today.
17. A particular structure or activity of a plant or animal to aid it in adjusting to its environment.
18. The location from which a plant originates. The California poppy is native to California.
19. Leaves are the main sites of photosynthesis and transpiration (water loss by evaporation) in plants.
21. The process plants use to make their own food using sunlight, water and carbon dioxide.
22. Growing or living in or upon water.
23. An aquatic flower of extraordinary beauty, its petals open to the sun and close at night. The sacred Indian lotus is a symbol of beauty and purity, rising out of muddy waters to elevate itself above the surface unblemished and supremely elegant.
24. Succulent plants with fleshy leaves that are spiny along the edge; mostly native to Africa.
25. Polish-born opera singer who in 1941 purchased the property which she later named Lotusland. From 1941 until her death in 1984, she applied her artistic talents to create unusual, dramatic, and beautiful gardens using rare plants. In 1958 she established the Lotusland Foundation to preserve her collections of exotic plants and to encourage increased knowledge and appreciation of the importance of plants and the need for their conservation.
26. The slender, tubular feeding and sucking organ of certain insects, such as butterflies.

Down

1. In danger of becoming extinct.
2. Shedding leaves annually (every year): opposed to an evergreen, which has green leaves throughout the year
3. A waste product of photosynthesis released through the stomata on the surface of leaves. It is an odorless, tasteless, colorless gas that is essential to life. Without plants, there would be no oxygen! Without oxygen there would be no life on earth as we know it.
4. A long period of unusually low rainfall, especially one that badly affects growing or living conditions.

5. A colorless, odorless gas that passes out of the lungs during respiration (when we exhale.) In photosynthesis, absorbed energy from the sun is used to join together carbon dioxide and water (H₂O) to form the sugar glucose, which is food for the whole plant. Oxygen (O₂), a waste product, is released into the air.
6. Pollen grains carry the male genes of a plant. These complex, self-contained units have a life of their own and are so tiny that they usually look like yellow or orange colored dust. Most plants produce masses of pollen. Corn produces about 25,000 pollen grains to fertilize one corn kernel.
9. A waxy protective coating over the outer surface of plants that reduces transpiration. Cacti have a very thick cuticle layer. The cuticle also serves as “sunscreen” for plants in sunny, hot climates.
10. Tiny holes (pores) in the lower surface of the leaf allow gases (carbon dioxide & oxygen) and water vapor to pass in and out of the leaves.
12. Plant adapted to dry regions. Some adaptations include reduced leaf area, hairs, spines, sunken stomata, rolled leaves, and thick cuticles; all to slow transpiration.
13. The study of plants
14. Green coloring (pigment) in plants that absorbs energy from sunlight & enables photosynthesis to occur. Used in dyes and medicines.
15. Resembling palm trees in appearance, cycads are seed-bearing plants that evolved some 250 million years ago and were a dominant plant group during the dinosaur era and a food source for them. Cycads are very rare; most are endangered, and some are extinct in the wild.
16. The name of a deciduous tree thought to be extinct until it was discovered in Chinese temple gardens in the 1700's. It is known as a living fossil dating back 370 million years.
20. Plants which survive long periods of drought by storing large amounts of water in their stems, leaves and/or roots.

Name _____

Lotusland VIP (Very Important Plants) Crossword Puzzle

