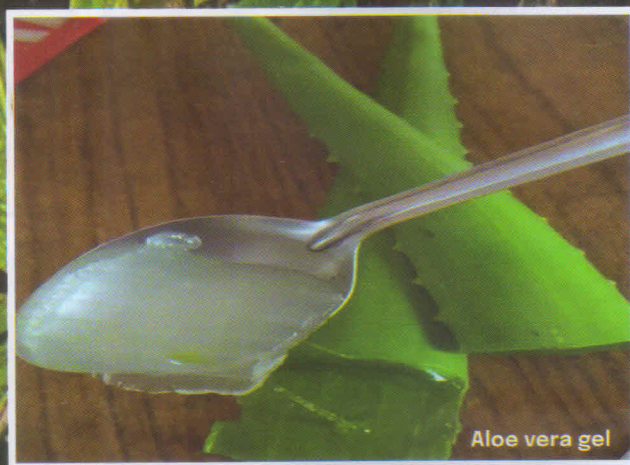


'Is your Aloe vera happy?'

Gulafshan



WE humans display joy through the two delightful expressions, laughter and a smile. But have you ever wondered how a plant can express its joy, and how to know if our household plants are happy? Well, plants don't have feelings, but making a plant happy means providing it with the best possible environment to flourish. Nowadays, almost all of us try to have aloe vera at home due to its wide application as a beauty, health, and skin care product. But some people fail to have it planted, and getting an aloe vera flower seems like a matter of luck for them.

The name aloe vera is derived from the Arabic word "Alloeh", which means shining bitter substance, and the Latin word "Vera" meaning true. It is also called the plant of immortality because it can survive and even bloom without soil. There are around 650 species of the genus Aloe, but some of them are poisonous. The most popular and edible one is *Aloe barbadensis miller*. Aloe vera is a succulent, evergreen perennial plant belonging to the family Asphodelaceae (Liliaceae). It is a xerophytic plant that can be grown worldwide but is mainly found in the dry regions of Africa, Asia, Europe, America, etc. It may grow 80-100

centimetres tall. However, the aloe vera flower is not very common. I did not know about it until my outdoor aloe vera bloomed last December.

Each part (leaves and flowers) of the aloe vera plant has commercial importance and can bear approximately 12-30 leaves. The leaves are green, thick, and fleshy with a serrated margin. The leaf contains a high amount of water, which is stored as gel. The leaf comprises three layers: rind, latex, and gel. The outer thick layer, made up of 15-20 cells with protective functions, is known as the rind. The latex is the bitter yellow sap that oozes out from the leaf when the leaf is cut from the plant. The latex contains approximately 80 chemical compounds; one is aloin, a phenolic compound. The yellow sap must be properly separated from the gel before using, since long-term intake of aloin may cause abdominal pain, spasm, and many other health issues. The inner layer of aloe vera leaves contains a translucent, extremely bitter gel (pH 4.5) having a wide range of medicinal properties. The gel comprises 99.1% water, vitamins A, B, C, E, 18 amino acids, acemannan (natural polysaccharide), enzymes, and minerals.

When an aloe vera plant is mature (around 4 years old) and is in the desired environment, it can reward with