



SOCIAL

Fibonacci spirals in nature

The Fibonacci numbers are Nature's numbering system. They appear everywhere in Nature, from the leaf arrangement in plants, to the pattern of the florets of a flower, the bracts of a pinecone, or the scales of a pineapple. The Fibonacci numbers are therefore applicable to the growth of every living thing, including a single cell, a grain of wheat, a hive of bees, and even all of mankind.

Plants do not know about this sequence - they just grow in the most efficient ways. Many plants show the Fibonacci numbers in the arrangement of the leaves around the stem. Some pine cones and fir cones also show the numbers, as do daisies and sunflowers. Sunflowers can contain the number 89, or even 144. Many other plants, such as succulents, also show the numbers. Some coniferous trees show these numbers in the bumps on their trunks. And palm trees show the numbers in the rings on their trunks.

Why do these arrangements occur? In the case of leaf arrangement, or phyllotaxis, some of the cases may be related to maximising the space for each leaf, or the average amount of light falling on each one. Even a tiny advantage would come to dominate, over many generations. In the case of close-packed leaves in cabbages and succulents the correct arrangement may be crucial for availability of space.

In the seeming randomness of the natural world, we can find many instances of mathematical order involving the Fibonacci numbers themselves and the closely related "Golden" elements.

Fibonacci spirals in plants
Phyllotaxis is the study of the ordered position of leaves on a stem. The leaves on this plant are staggered in a spiral pattern to permit optimum exposure to sunlight. If we apply the Golden Ratio to a circle we can see how it is that this plant exhibits Fibonacci qualities.



Importance of urban agriculture

Urban gardening or urban agriculture is the practice of cultivating, processing and distributing food around the city. This practice should not only be carried out in small villages but also in big cities. Urban agriculture symbolises sustainable development which is very useful for big cities where its given least importance. As the population in large in such big cities, urban agriculture can be very usefuol and beneficial to the restaurants here. It can be easy for chefs from highend restaurants to make food.



It can be beneficial in New York as it would lesser down the food rates and thus make it affordable for people with all type of incomes. This type of gardening does not require a huge land or a plot and therefore can also be executed anywhere. Urban gardening can also improve the quality of air to a certain extent.

This is why urban agriculture is beneficial in a city like New York.

