

1. India's Covid rise is the third fastest in the world. (11,220 cases and 325 deaths reported yesterday). The recovery rate in India is around 51%.
2. Fresh new Covid cases crosses 50 in Beijing.
3. Leucism found to be increasing in Nilgiris Wildlife Sanctuary.

### Definition of Leucism

Leucism is a term for the physical composition that results from a flaw in pigment cell differentiation. This causes either the entire surface or patches of body surface (if only a subset are defective) having a lack of cells that can make any pigment.

All pigment cell-types draw their genetic data from the same precursor cell-type. Hence, leucism can cause the reduction in all types of pigment. This is in contrast to albinism, which leucism is mistaken for. Albinism results in the reduction of melanin production only, though the melanocyte is still present. Thus in species that have other pigment cell-types, for example fishes that have pigments causing yellow skin the albino variant of these fish species will not be entirely white, but instead display a pale yellow colour.

More common than a complete absence of pigment cells is localized or incomplete hypopigmentation, resulting in irregular patches of white on an animal that otherwise has normal colouring and patterning. This partial leucism is known as a "pied" or "piebald" effect; and the ratio of white to normal-coloured skin can vary considerably not only between generations, but between different offspring from the same parents, and even between members of the same litter. This is notable in horses, cows, cats, dogs, the urban crow and the ball python but is also found in many other species.

### How is Leucism different from Albinism?

A further difference between albinism and leucism is in eye colour. Due to the lack of melanin production in both the retinal pigmented epithelium (RPE) and iris, those affected by albinism typically have red eyes due to the underlying blood vessels showing through. In contrast, most leucistic animals have normally coloured eyes. Instead, an out-pouching of the neural tube generates the optic cup that, in turn, forms the retina. As these cells are from an independent developmental origin, they are typically unaffected by the genetic cause of leucism.

It can also cause patchy colouration. But the eyes are not affected in this condition. Leucism is different from albinism in that it is caused by a decrease in various types of pigments and not only melanin. It is caused because of defects in the differentiation of pigment cells and/or migration from neural crest to feathers, hair or skin during development.

### Can humans be Leucistic?

In humans, it appears that Vitiligo is a common manifestation of a particular type of leucism that can also affect animals. Patchy leucism is the most commonly seen type in animals.

Is Leucism a mutation?

Leucism is an abnormal plumage condition caused by a genetic mutation that prevents pigment, particularly melanin, from being properly deposited on a bird's feathers. As a result, the birds do not have the normal, classic plumage colors listed in field guides.

How common is Leucism?

Leucism in birds is overall rare but relatively more common than albinism. Leucistic birds show a variable amount of white or pale in the plumage. The eyes, bill, and other bare parts are of the normal color.

Is Leucism dominant or recessive?

Leucism (from the Greek, leukos, white) is a genetic peculiarity due to a gene, recessive in most cases, which gives a white color to the fur or feathers of animals which normally would have a different color.