Flowers losing scent due to climate change

KUALA LUMPUR: A rose may stop smelling like a rose.

This is the concern of environmentalists as flowers are losing their scent due to climate change and air pollution. And their fragrance may be lost forever.

Science and Technology Professor Emeritus at Universiti Kebangsaan Malaysia, Dr Abdul Latif Mohamad, said genetically modified flowers might be the way out.

Climate change is also the reason Kuala Lumpur City Hall is increasingly turning to shady trees, because flowers which previously formed the centrepiece of its beautification programme have wilted fast.

Datuk Bandar Datuk Ahmad Fuad Ismail said City Hall used to spend RM1.5 million a month to plant and maintain flowers in the city, but the contractor’s services were terminated in March last year.

City Hall has taken over the planting, opting for bougainvillea and the tropical shrubs, ibora, for their durability and cheaper cost.

Under the previous arrangement, some of the small flowers cost RM3.30 per seedling.

“I was getting too costly to beautify the city. Flowers were dying fast,” he said, adding that City Hall would continue to plant shady trees more suited for soaking up the increasing pollution and coping with global warming.

Latif said UKM might have offered plausible reasons as to why some pollinators were not spreading flower seeds, a pattern caused by the missing “scent trail” with scent tissues burning easily due to global warming.

“The aroma producing chemical compounds in flowers dry up faster now compared with before.”

The only way out, he said, was to genetically modify the flowers so that the effects would not be permanent and the future generation would not be robbed of nature’s beauty.

“The act is almost like producing essential oils. Scientists add on certain chemicals for stronger scent.”

He said scents in flowers last longer in colder climate as plants can hold on to their essential oils longer.

“The flowers may still have strong scents in colder climate. But locally, we fear this might be lost forever.”

With flowers emitting lesser scent, the insects and butterflies are travelling further and longer to get a share of nectar.

Latif said birds and insects were heading towards hilly areas and deeper into the jungles where the weather is cooler.

He related an incident in Sungai Siput, Perak, where the farmers failed to get fruits from their orchards.

Upon investigation, Latif’s team discovered that the flowers were no longer pollinating after dust from a hill blast blocked the growth of stigmas.

He said Malaysians could no longer rely on nature to heal itself without the help of science.

He said Malaysia needed to follow in the footsteps of Japan, Europe, the United States, China and South Korea which have invested millions in the research of genetically modified seeds.

Forest Research Institute Malaysia (FRIM) director-general Datuk Dr Abdul Latif Mahmod said recently the extreme weather change might affect the life span of trees as a result of lighter or heavier rain.

“We should look at how trees can be mutated so that they will not be destroyed.”

He said experts, including from FRIM, should look at ways to prolong the lifespan of certain plants.

Meanwhile, Natural Resources and Environment Deputy Minister Tan Sri Joseph Kurup said given the extreme climate changes, every country should work together and not in isolation.

He said the decline in global biodiversity and ecosystem services urgently called for proactive measures.

"Both policy-makers and researchers need to work hand in hand to strengthen forest genetics, breeding and conservation.”