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A virus was found naturally infecting *Lactuca sativa* in a field near Benha, Kalubia , Egypt. The virus induced severe mosaic mottling, sharp distortion and abnormalities on the leaves.

In a trial to identify the virus physical properties, electron microscopy and host range were studied.

The histopathological changes of *Hibiscus schizopetalus* leaves showing necrotic local lesions induced by the virus were also studied.

The results revealed that:

The virus is mechanically transmissible and is also transmitted by the seed.

The thermal inactivation point is70° C for 10 min. Its dilution end point is $1:4\times10^{-6}$ and completely inactivated after 210 days at 20-30°C.

Electron microscopy showed the virus particles with mean length 740 x 13nm.

There are many hosts to this virus some hosts show local lesions as *Acalypha wilkesiana* Müll. Arg.,*Brassica rapae* L. var. rapifera koch ,*Chenopodium album* L.(white goose foot), *Colocacia antiquorum* schott, *Corchorus olitorius* L, *Eruca sativa* Miller(Rocket), *Gazania splendens*

Hort.ex E.G.Henders. and A.Henders.(Treasure flower),*Helianthus annuus* L.(sun-flower), *Hibiscus schizopetalus* (M. T. Mast.) Hook. F., *Lupinus termis* Forssk (Egyptian lupin), *Malva parviflora* L. (small flowered mallow), *Pelargonium zonale* Ait., *Raphanus sativus* L. var. aegyptiaca Sick. (Radish), *Solanum melongena* L. var. atroviolacea Sick. *Solanum tuberosum* L. (potato), *Sonchus* oleraceus L. (sow-thistle), *Spinacia oleracea* L. (Garden-spinach) and *Zinnia elegans* Jacq .

Other hosts show local lesions followed by systemic symptoms as *Chenopodium quinoa* willd, *Lycopersicon esculentum* Mill. (Tomato) and *Pisum sativum* L. (Garden pea).

From the above results it was deduced that the virus under test is a new resistant strain of lettuce mosaic virus.

The histopathological studies of *Hibiscus schizopetalus* leaves infected with the virus and showing necrotic local lesions revealed that the blade is not clearly flat. The thickness of the blade is unequal on both sides of the midrib.

The upper and lower edges of the midrib showed clear collenchyma cells. The epidermal cells has few distorted stomata and covered with thick cuticle.

The mesophyll cells appear compact without differentiation into palisade and spongy tissues. The chloroplasts are few and the number of druses calcum oxalate crystals is clearly few.

Necrotic spots appear on both upper and lower epidermis densely stained with safranin.

The virus has no effect on xylem and phloem cells. The parenchyma cells surrounding the vascular tissue appear wavy walled.