

SAFMOVI (Safe From Microorganism And Virus)

Naufal Arif Baskara dan Muhammad Rasyid Salahuddin

theflyingcow149@gmail.com

SMA NEGERI 3 SEMARANG

ABSTRACT

Ultraviolet (UV) rays have long been recognized as an effective instrument against harmful disease-causing agents. UV rays are often used to sterilize medical equipment in hospitals. The ability of UV lamps to fight viruses is to use UVC which has a wavelength of 100-280 nm. UVC rays have the potential to destroy bacteria and viruses without the risk of penetrating the protective layer of the skin or damaging human eyesight because UVC rays have very short wavelengths. The corona virus in humans has a similar genomic size, so far UVC rays are expected to show similar inactivation efficiency against SARS-CoV-2. Most people can catch the virus when they touch a contaminated surface and then touch their face. Doorknobs can be a medium for transmitting the corona virus which is currently endemic. As we know there are recommendations in shopping centers, offices and schools to open doors using the tips of the feet and elbows to avoid direct contact with the hand with the doorknob so as to minimize the risk of contracting covid 19. This is of course very troublesome when you have to open the door using your hands. or elbow. For this reason, the researchers got the idea or idea to make a virus protection device on the door handle which was named SAFMOVI (Safe from Microorganism and Virus). Researchers used a remote UV LED lamp which has a wavelength of 280 nm. The purpose of making this tool is to minimize the transmission of the virus when people want to open or close doors. The advantage of SAFMOVI is that it uses remote UV LED light which is safe to use, cheap and easy to manufacture.

Keywords: viruses, corona, UV rays, microorganisms.