Scientists create antibacterial hydrogel bandage from durian fruit

Scientists at Nanyang Technological University, in Singapore (NTU Singapore) have created an antibacterial gel bandage from the husk of a tropical fruit, the durian fruit.

In order to create this new bandage, the scientists extracted cellulose from the fruit and combined it with glycerol to create a soft gel. Organic molecules produced from the natural phenolic compounds of yeast were added to the gel to help prevent the growth of bacteria, such as gram-negative E. coli and gram-positive S. aureus, and the formation of biofilms.

The scientific community is increasingly interested in hydrogels made from natural raw materials rather than synthetic hydrogels. By using and transforming food waste, from the durian fruit for example, researchers are offering a valuable biomedical resource that could reduce the time the wound needs to heal, while reducing the risks of infection.

Andrew Tan, associate professor and associate dean of the Lee Kong Chian school of medicine at NTU claims that “there are natural and synthetic hydrogels on the market today, which are recognized for their ability to heal certain types of wounds.”

Source: techexplorist.com (https://www.techexplorist.com/antibacterial-gel-bandage-durian-husk/38453/)

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