Face masks (cover story)

Recommendations of disposable masks for asthmatic students working with fungal spores are described.

Introduction

SSERC received an enquiry recently in connection with the use of the SAPS ELISA kit for the detection of *Botrytis* infection in raspberries (see Fig. 1). The kit provides specific safety advice on its use. One particular safety point advises that if a user of the kit is asthmatic a face mask should be worn, as fungal spores may be released into the air during the experiment.

The enquiry we received focused on what we thought would be the best disposable masks to use for asthmatic students wishing to carry out the experiment, or indeed any other experiment involving fungal spores. See the table below for our recommendations, which have taken into account the need for a small pore size within the mask.

* Best price found.

All FFP3 Classification Masks



Figure 1 - Raspberries infected with Botrytis.

It should be noted that the best disposable face masks/respirators should conform to BS EN149:2001.

In addition, the HSE advise the following with respect to respirators:

To help ensure you are protected, all respirators provided for use at work must be CE marked. Additional markings, such as FFP1, FFP2 or FFP3, indicate the protection level that you can get if the respirator is a good fit and you use it correctly. The higher the number, the better the protection. FFP1, FFP2 and FFP3 respirators can reduce the amount of dust you breathe by factors of 4, 10 and 20 respectively. An FFP3 respirator is advisable if you are exposed to high levels of grain dust or mould spores.

References

HSE website: http://www.hse.gov.uk/agriculture/dustmasks.htm

SAPS website: http://www-saps.plantsci.cam.ac.uk/workshop_elisa.htm

Manufacturer/Range (masks)	Key Catalogue	Protec Catalogue	RS Components
3M / 8833	/	£36.13 pk 10	/
3M / 8835	/	£19.69 pk 5	£5.75 each
3M / 9332	£44.35 pk 10	£34.69 pk 10	£4.60 each
JSP / Valved Moulded	£29.00 pk 5	/	£23.95 pk 5
JSP / Valved Folded	£36.00 pk 10	/	£41.50 pk 10
Respair / Economy	/	£7.57 pk 5	/
Respair / Cupped	/	£13.75 pk 5	/
Key / Budget	*£24.50 pk 20	/	/
Key / Regular	£11.50 pk 5	/	/
Website (www.)	keyind.co.uk	protecdirect.co.uk	http://rswww.com
Telephone	0845 6040660	0870 333 3081	08457 202201



