

FIG. S1. The different swab material used in the swabbing experiment (A): 1-6 represent Hi-Media (HM)-foam, HM-nylon, HM-polyester, HM-cotton, Johnsons bud and Tulips bud, respectively; (B) swab heads after swabbing operation showing the integrity

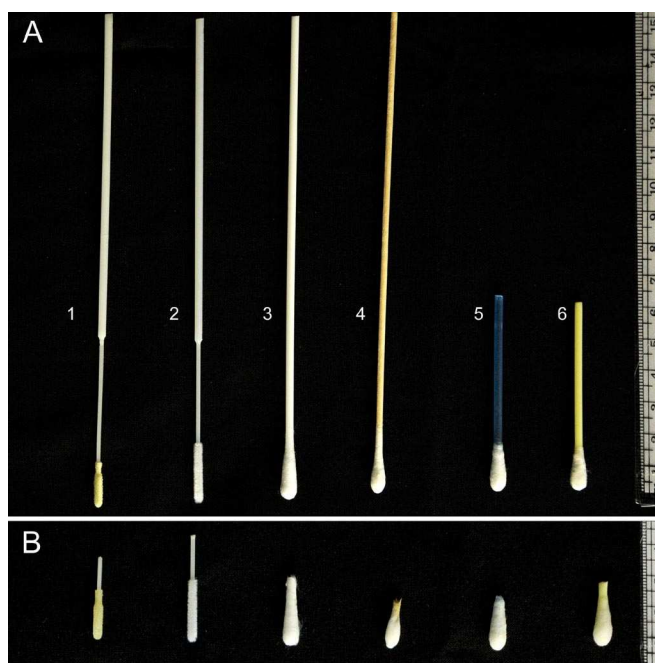


TABLE S1. Characterization of different swabs in terms of the net weight of the swab material and the water holding capacity, time taken for the inoculum recovery and the cost in relation to the recovery efficiency

Type of swab	Swab ranking as per % RE	Net wt of swab material (mg)	Quick-dip of swab		Saturation soaking of swab		Time to saturation (s)	Time needed for swabbing†(s)	Cost / unit (INR)
			Water absorption (mg / swab)	Hydrophilicity index (mg / mg)	Gross water holding (mg / swab)	Gross water holding index (mg / mg)			
HM- foam	VI (22.8 %)	9.7 ± 0.72 <sup>b</sup>	16.4 ± 3.50 <sup>a</sup>	1.7 ± 0.38 <sup>a,b</sup>	21.2 ± 2.52 <sup>a</sup>	2.2 ± 0.21 <sup>a</sup>	40-60	172.7 ± 38.3 <sup>b</sup>	35.0
HM- nylon	V (45.0 %)	3.8 ± 0.33 <sup>a</sup>	61.9 ± 6.08 <sup>b</sup>	16.6 ± 2.13 <sup>d</sup>	76.4 ± 8.89 <sup>b</sup>	20.4 ± 1.18 <sup>d</sup>	20-30	211.7 ± 17.4 <sup>c</sup>	35.8
HM- polyester	IV (50.2 %)	49.7 ± 4.22 <sup>c</sup>	103.2 ± 36.4 <sup>c</sup>	2.1 ± 0.58 <sup>b</sup>	158.5 ± 21.3 <sup>c</sup>	3.2 ± 0.23 <sup>a</sup>	20-40	53.8 ± 7.60 <sup>a</sup>	13.6
HM- cotton	III (56.6 %)	22.5 ± 6.54 <sup>c</sup>	20.2 ± 5.95 <sup>a</sup>	0.9 ± 0.38 <sup>a</sup>	145.1 ± 19.0 <sup>c</sup>	7.0 ± 2.0 <sup>b</sup>	70-90	53.3 ± 8.79 <sup>a</sup>	3.12
Johnsons bud	II (64.1 %)	29.2 ± 3.39 <sup>d</sup>	56.5 ± 18.60 <sup>b</sup>	2.1 ± 0.88 <sup>b</sup>	256.4 ± 12.8 <sup>e</sup>	8.9 ± 1.14 <sup>c</sup>	30-50	36.3 ± 4.46 <sup>a</sup>	0.75
Tulips bud	I (70.6 %)	26.3 ± 3.34 <sup>d</sup>	128.5 ± 20.36 <sup>d</sup>	4.9 ± 0.67 <sup>c</sup>	222.1 ± 21.6 <sup>d</sup>	8.5 ± 0.81 <sup>c</sup>	20-30s	40.8 ± 4.45 <sup>a</sup>	0.18
P =		2.85 × 10 <sup>-18</sup>	2.44 × 10 <sup>-11</sup>	4.74 × 10 <sup>-22</sup>	1.83 × 10 <sup>-21</sup>	2.90 × 10 <sup>-22</sup>		2.7 × 10 <sup>-18</sup>	

†Based on the time taken for the drawing of the applied 100 µl PBST by the swab head from the sampling spots; six replications in all instances

INR, Indian National Rupee, Values followed by the same letter are not significantly different.

Hydrophilicity index = quick-dip water holding capacity (mg) ÷ net wt of swab (mg); Gross water holding-capacity index = saturation water holding (mg) ÷ net wt of swab (mg)

TABLE S2. Recovery of different organisms from the steel work bench of laminar airflow with the Tulips cotton bud swabbing

Organism	Amount of 2.0 OD spore suspension used / spot <sup>§</sup>	CFU applied / spot ( $\times 10^6$ )	CFU recovery per spot ( $\times 10^6$ )	Recovery efficiency (%)
<i>Bacillus pumilus</i>	12.5 $\mu$ l	11.4 $\pm$ 1.45	8.0 $\pm$ 1.71	70.2
<i>Bacillus cereus</i>	50 $\mu$ l	10.3 $\pm$ 0.69	7.9 $\pm$ 0.47	76.6
<i>Bacillus thuringiensis</i>	75 $\mu$ l	12.4 $\pm$ 1.21	9.4 $\pm$ 0.51	76.4
<i>Brevibacillus</i> sp.	100 $\mu$ l	9.6 $\pm$ 0.75	6.9 $\pm$ 0.93	72.1
<i>Lysinibacillus</i> sp.	50 $\mu$ l	10.9 $\pm$ 1.86	7.8 $\pm$ 0.84	71.3
<i>Paenibacillus</i> sp.	150 $\mu$ l	14.0 $\pm$ 0.66	10.4 $\pm$ 2.12	74.4
<i>B. subtilis</i> (control)	12 $\mu$ l	10.1 $\pm$ 1.21	7.6 $\pm$ 0.77	71.5

<sup>§</sup>Quantity used to obtain the estimated CFU of  $1 \times 10^7$  CFU per spot based on the preliminary CFU assessment of the stock; Variable amounts due to the differences in spore size and the consequent CFU ml<sup>-1</sup> for different organisms