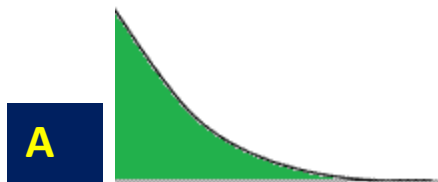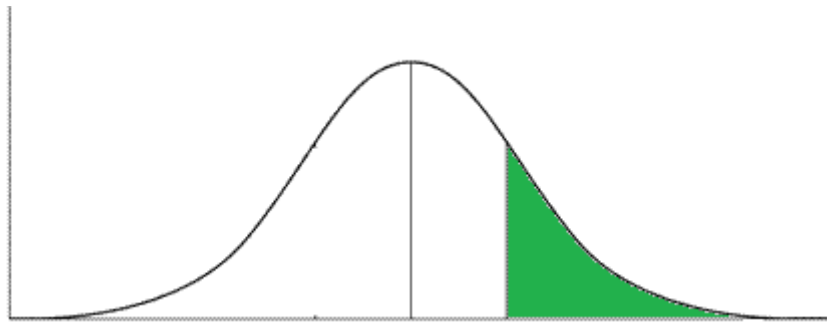# Response to selection
(selection intensity - selection differential)

Theoretically:

The smaller the selected portion, the larger the selection differential (SD) as in B

The larger the selection differential (SD), the higher will be the response to selection

$R = SD \times h^2$

(assuming the heritability coefficient H^2 is constant)

The question will remain how small the selected portion that leads to highest selection gain without **inbreeding** problems

Abdel Rahman El Gamal