



Fig. 3. Examples of inoculation patterns used to randomize treatments upon test material for: **(A)** two samples in a direct comparison; **(B)** five samples, where two primary opposite leaves are available for inoculation; and **(C)** a Latin square in which four samples are inoculated to plants with multiple leaves available for inoculation.

*unguiculata* spp. *sinensis*). In this case, the two samples can be compared on opposite primary leaves. The outline of an experiment of this kind is shown in **Fig. 3A**, comparing samples A and B.

If multiple samples are to be compared, again using a host that has opposing leaves, it is suitable to compare each sample with each of the other samples on opposite sides, an equal number of times, as shown in the outline in **Fig. 3B**. In this case, samples A–E are being compared.

If multiple samples are to be compared using a host in which a number of leaves are available for inoculation, such as *Chenopodium quinoa*, where four to eight leaves may be available, a Latin square design is most suitable. In this lay-