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| **Abstract** | : | The permeability measurements of synthetic fibre reinforcements have been getting a lot of interest in literature to date, however, there is limited research on permeability studies of natural fibre reinforcements. The permeability behaviour of reinforcement depending on the fabric's complex architecture, this leads to the difficulties in developing analytical models due to this variation and complexity. In practice, there are several difficulties in developing methodology especially, selecting the most appropriate methods either via experimental, theoretical and/or modelling works best suited. Therefore, the selection for the most suitable methods would require careful and systematic decision in choosing the most appropriate methods to be suited to the scope of work. This paper intends to give an important start in this challenging task for a decision, through a systematic de cision matrix analysis considering several methods in order to weigh their strength and limitations. A simple decision matrix method was performed for each of cases, by identifying the main factors which were the cost, time, applicability, reliability, limitations, and suitability of each method. The factors were assigned their relative importance accordingly. A methodology framework has been proposed for permeability prediction via modelling, simulation and experimental works. A well designed experimental and simulation works is important influencing the results and conclusions to be drawn depend to a large extent on how the data is collected. |