

How to evaluate/assess the results of a CIPAC trial

In addition to the known criteria (*CIPAC Guidelines on method validation to be performed in support of analytical methods for agrochemical formulations*), the use of the HorRat value could be an additional criterion.

$0.3 \leq \text{HorRat} \leq 1$ \Rightarrow *fully acceptable*

$\text{HorRat} < 0.3$ or $1 < \text{HorRat} \leq 2$ \Rightarrow *Acceptable, but reasonable explanation required!*

$\text{HorRat} > 2$ \Rightarrow *not acceptable*

In which the meaning is:

If HorRat is $\gg 1$, the analytical method is undoubtedly suspect to perform worse than expected/hoped (e.g. due to method deficiencies or due to interferences, contaminations or sample inhomogeneity)

If HorRat is $\ll 1$, suspect comes out that the collaborative trial was not performed correctly and it gives precision values that are too optimistic (e.g. due to less participants or prior knowledge of analyte content)

If HorRat is close to 1, method precision in terms of reproducibility is close to the predicted value