

# PROFICIENCY TESTING SCHEMES IN BIOLOGICAL AREA OF BRAZILIAN ACCREDITED LABORATORIES ACCORDING TO ISO/IEC 17025:2005

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## INTRODUCTION

Proficiency Testing (PT) – to evaluate the performance of the laboratories.

Biological Testing:

- variability in measurement results (organism, method, matrix).
- one of the most frequent testing in accredited laboratories in Brazil.

Accredited laboratories define its level and frequency of participation in the PT Plan.

A survey was sent to them to standardize practices and present them to providers.

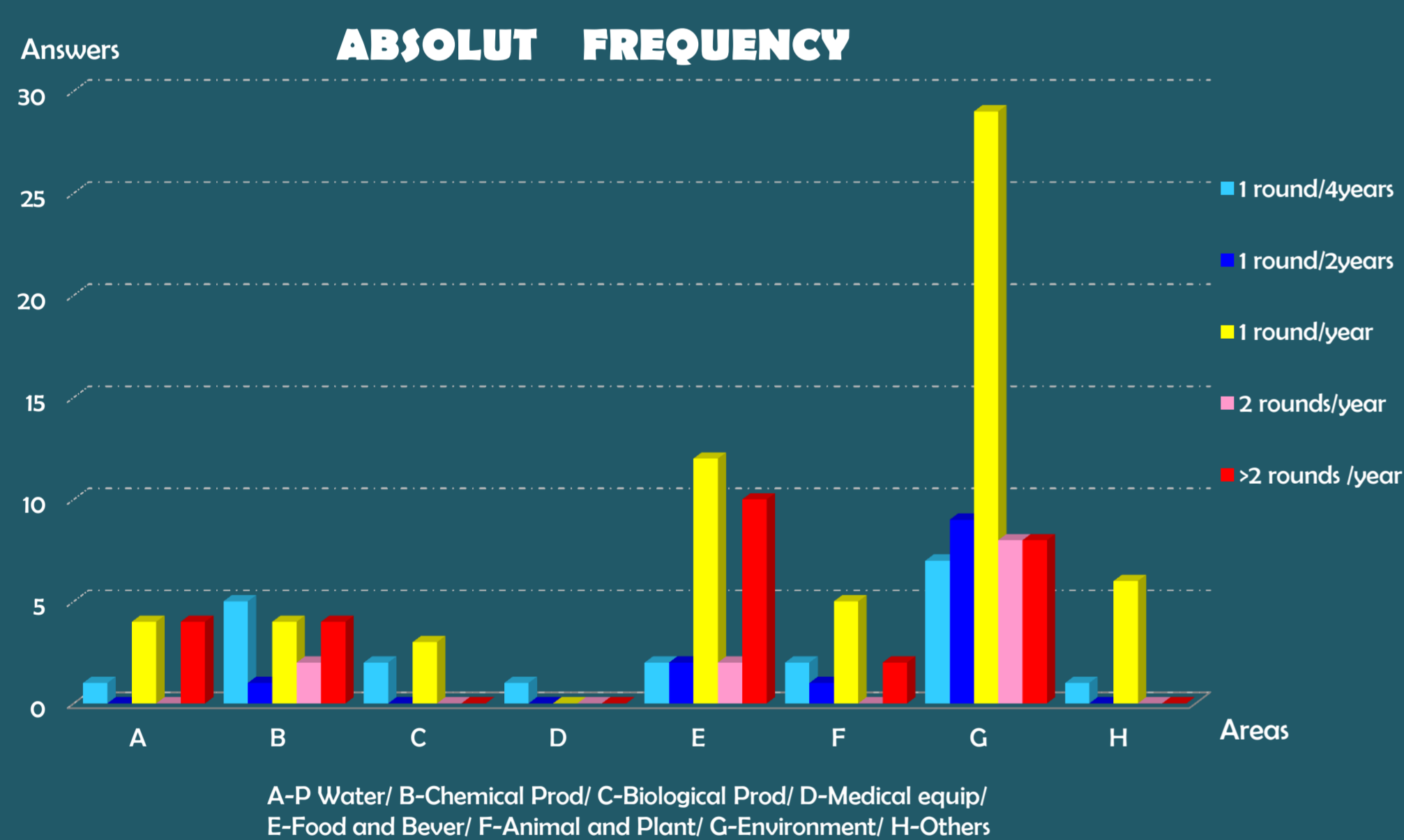
## METHOD

- 180 Brazilian accredited laboratories whose scopes contains Biological Testing, according to ISO/IEC 17025 (CGCRE, 2014).
- 91 laboratories answered.
- It was possible to answer more than once
- There are laboratories with more than one area.

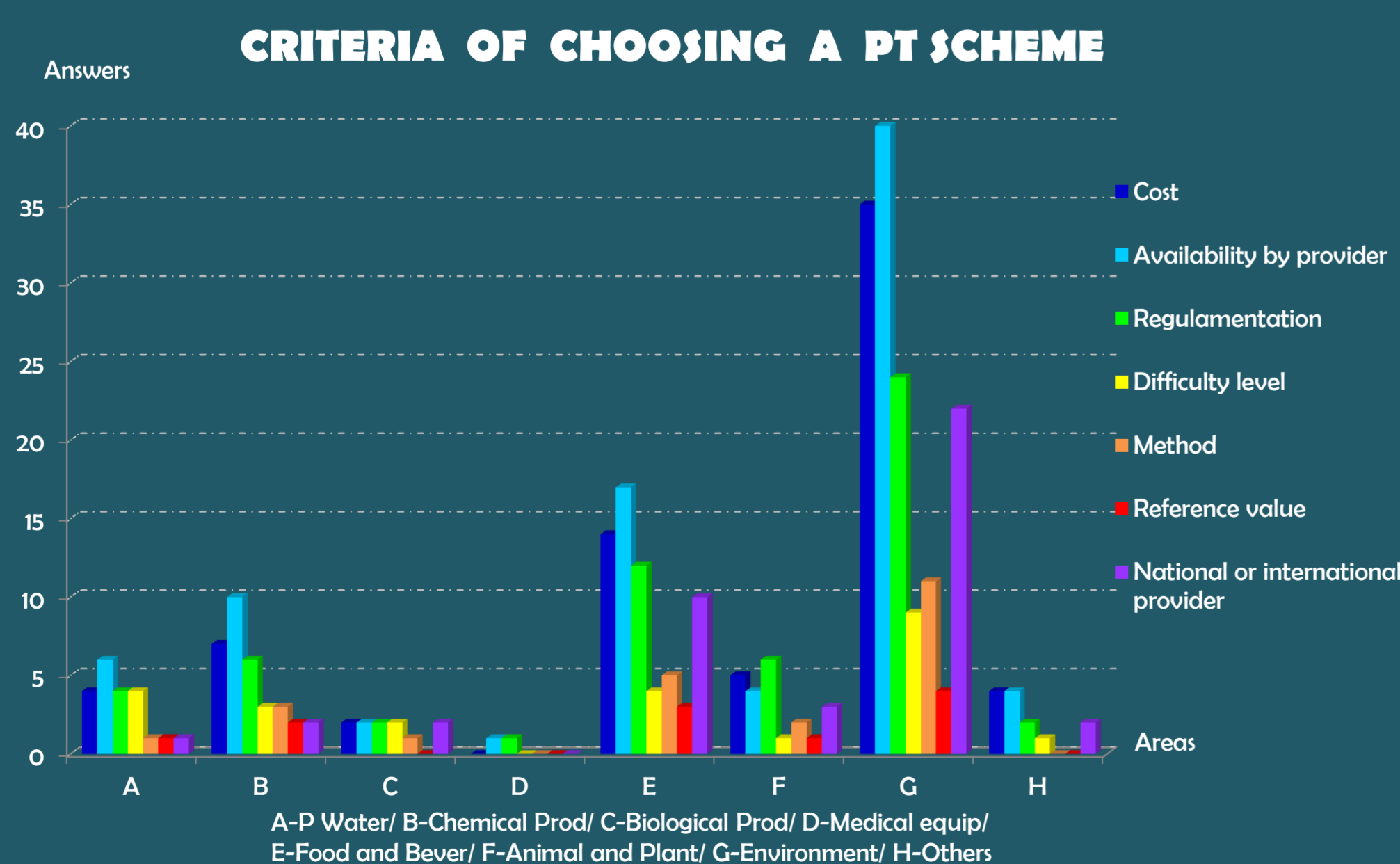
There are a great amount of laboratories in environmental area, and it can be noticed in the results.

It was considered the absolute number of answers in all the graphics.

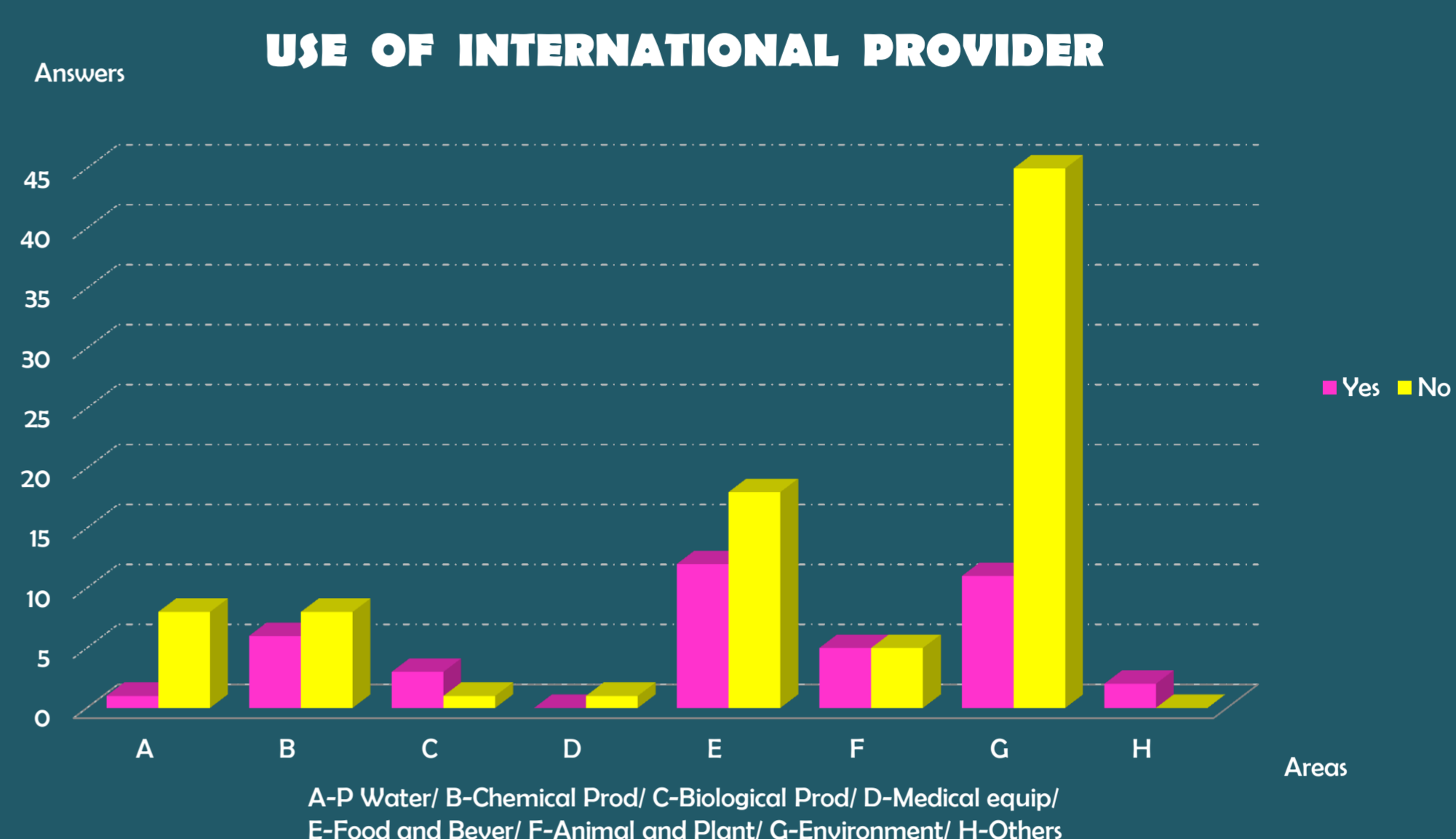
## RESULTS



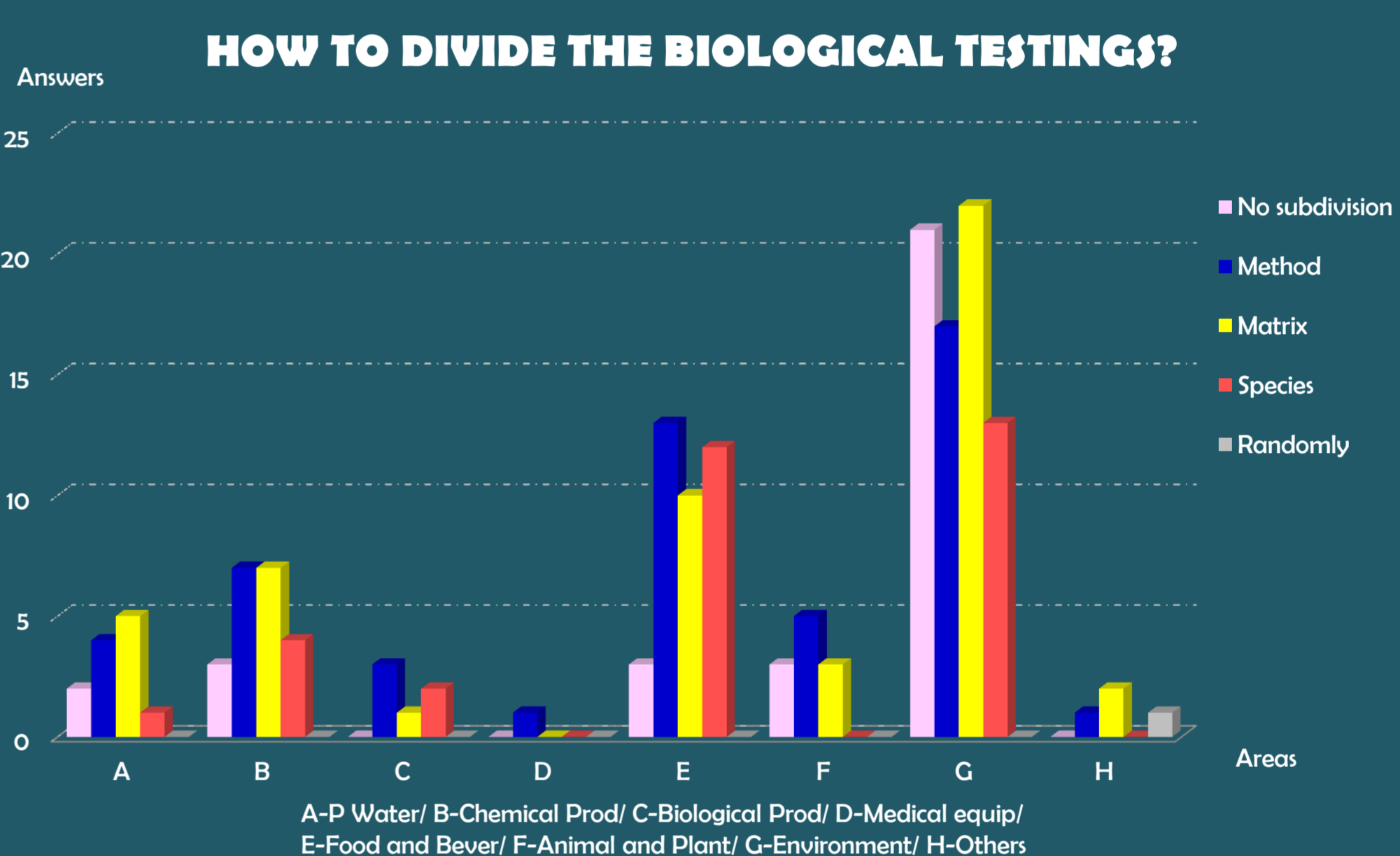
Each product/area has to be analyzed separately, but considering the total of Biological Testing: the frequency on PT participation was mainly 01 ROUND PER YEAR for 63 participants.



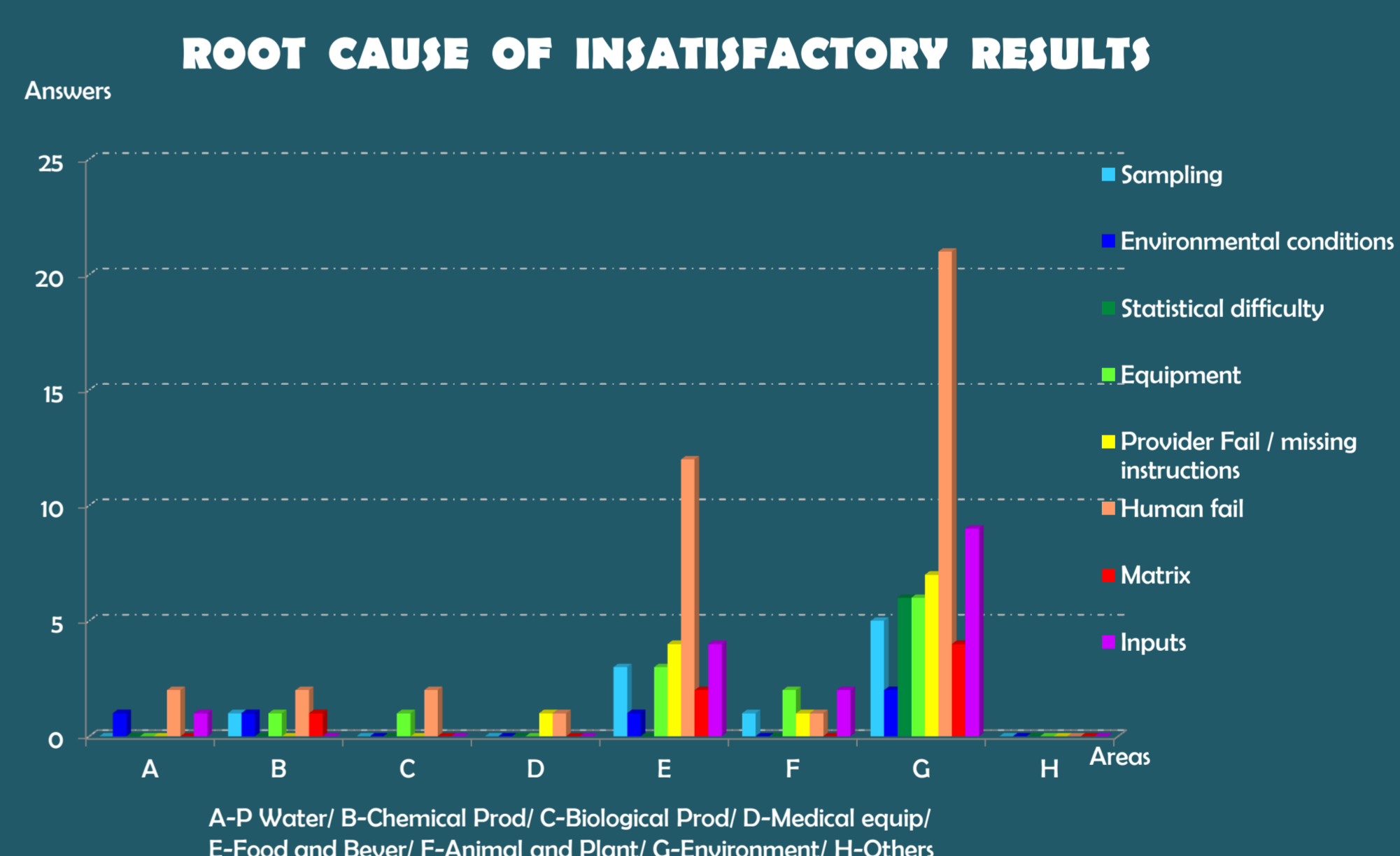
The more influent criteria to participate was depending upon the frequency of AVAILABILITY OF THE PROVIDER, according to 84 answers.



86/126 answers did NOT participate in international PT Schemes.



In general, the PT Plan was based on the subdivision of scope of accreditation. There was a great variation of answers for each product/area, but METHOD (51) and MATRIX (50) were the more influent, followed by specie/organism (32).



Most of the answers (41/111): main root cause of insatisfactory results is HUMAN FAIL.

## CONCLUSION

All the results can be analyzed by CGCRE in order to specify a policy on participation in PT schemes related to biological laboratories, for each area of activity. There are 05 Brazilian PT providers that are accredited, considering Biological Testing. We hope that PT providers amplify the scopes of PT schemes in Brazil.

## REFERENCES

- ISO/IEC 17043: 2010 - Conformity Assessment - General requirements for proficiency testing.
- Eurachem\_PT\_Guide: Selection, Use and Interpretation of PT Schemes
- EA-4/18:2010 - Guidance on the level and frequency of proficiency testing participation.
- APLAC PT 06:2010 - Proficiency Testing Frequency Benchmarks.

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