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**SURVEYING OF
PAPILLARY FRAGMENTS
ON UNUSUAL
SURFACES**

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INTRODUCTION

Papilloscopic examinations carried out at crime scenes and on objects seized there allow the detection of fragments of latent papillary prints on different surfaces, since the reagents used are specific, interacting physically and/or chemically with the components of the fingerprint. Most of them have an indication for application on a specific surface according to its porosity characteristics. However, there are still supports that do not have a characterized reagent for their treatment in papilloscopic examination.

GOALS

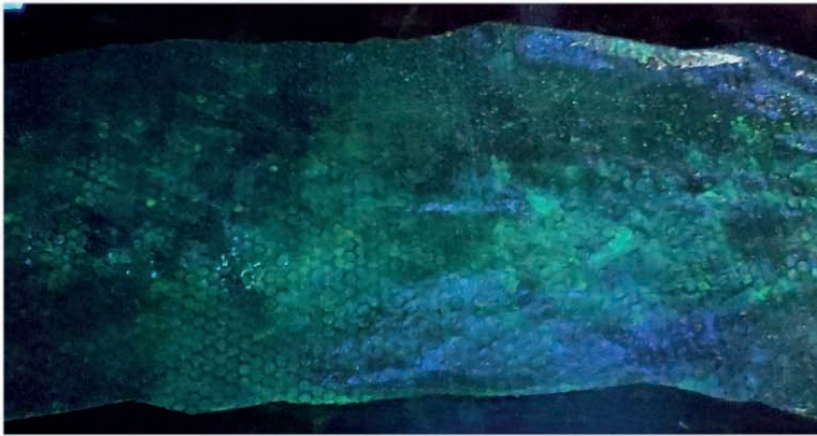
The objective of this work is to demonstrate the possibility of revealing fragments of latent prints on unusual surfaces using papilloscopic examination reagents.

METHODOLOGY

Three cases were analyzed that resulted in fragments of papillary impressions revealed in the laboratory with different papilloscopic reagents. In both cases, the materials were seized at crime scenes and sent to the Papilloscopic Laboratory for examination. For each of them, the methodology applied followed the protocol of the FBI Fingerprint Processing Guide (FBI, 2000). Among the techniques used we included the application of cyanoacrylate (Sirchie®) alone - used in metallized drug packaging with an irregular surface; application of cyanoacrylate (Sirchie®) followed by staining with basic yellow fluorescent dye (Tritech Forensics®) - used to treat carbon paper and bubble wrap and revealed with ultraviolet light (Figure 1).



A.



B.



C.

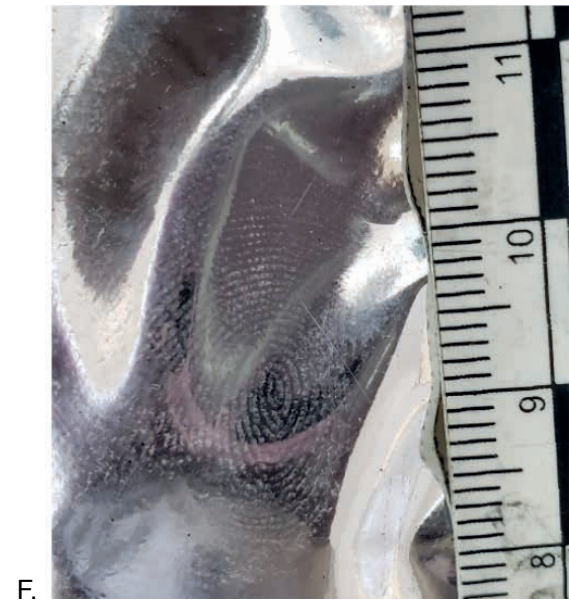
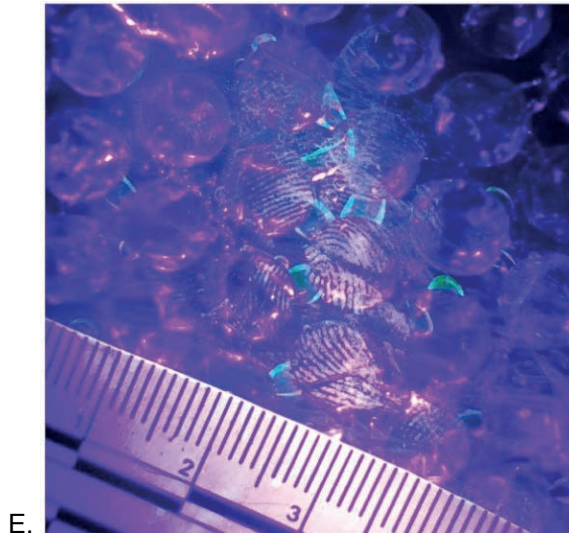
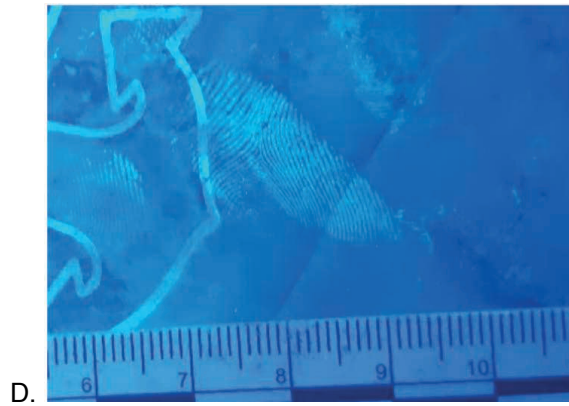


Figure 1. Materials seized at crime scenes and examined in the papilloscopic laboratory. A – Carbon paper; B – Bubble wrap; C - Metallized drug packaging with irregular surface; D, E and F – Papillary fragments revealed and positive in A, B and C respectively.

RESULTS AND DISCUSSION

It was observed that by treating unusual surfaces that are not suitable for the application of a certain forensic reagent, it was possible to reveal latent papillary fragments with excellent conditions for research and comparison in the AFIS system of the Civil Police of the State of Goiás, indicating possible authorship of the criminal act. to the police authority (Silva, 2021).

CONCLUSION

The results of this work demonstrate that

the application of reagents to surfaces that differ from those indicated in papilloscopic examination protocols is possible, obtaining positive results and enabling new applicability of papilloscopic reagents already used in routine practice.

ACKNOWLEDGMENTS

We would like to thank all the professionals who worked directly and indirectly in these cases.

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