

# Statistic evaluation of possible loss of material when using SPERM TRACKER™ for semen stains localization

Emilie Borges <sup>1</sup>, France Laval <sup>1</sup>, Magalie Faivre <sup>2</sup>, Céline Popielarz\* <sup>1</sup>

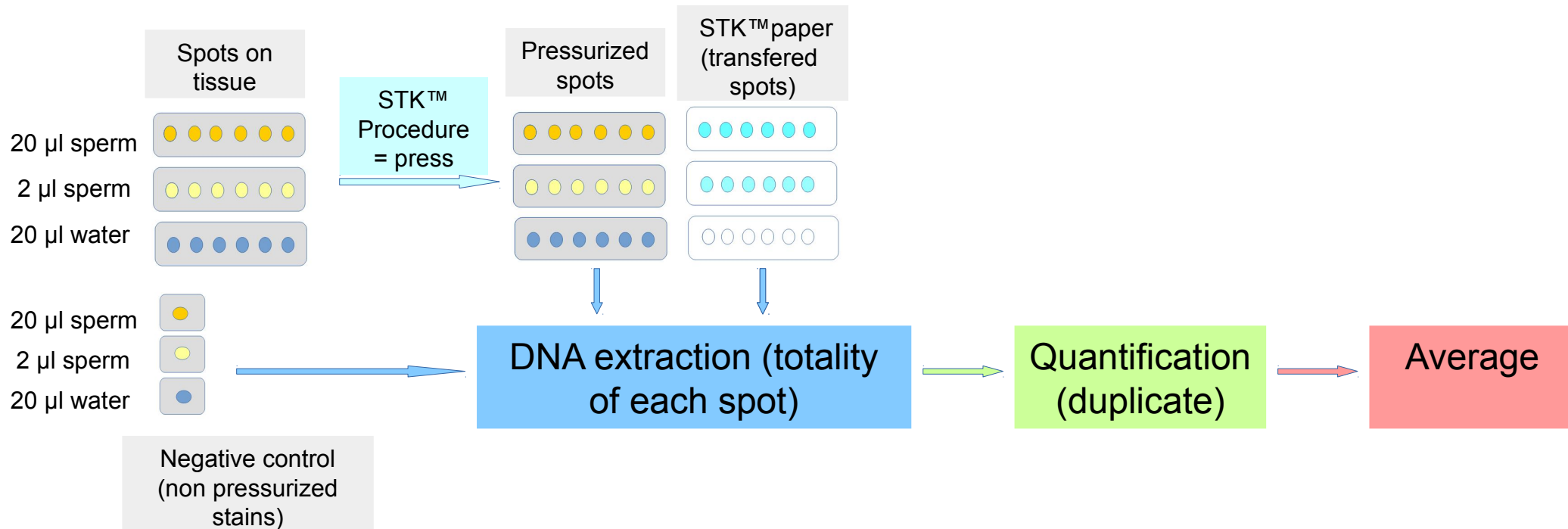
<sup>1</sup>Section Biologie Traces, <sup>2</sup>Section de Soutien Analytique,  
Laboratoire de Police Scientifique de LYON (INPS/LPS69), ECULLY, FRANCE

## Introduction

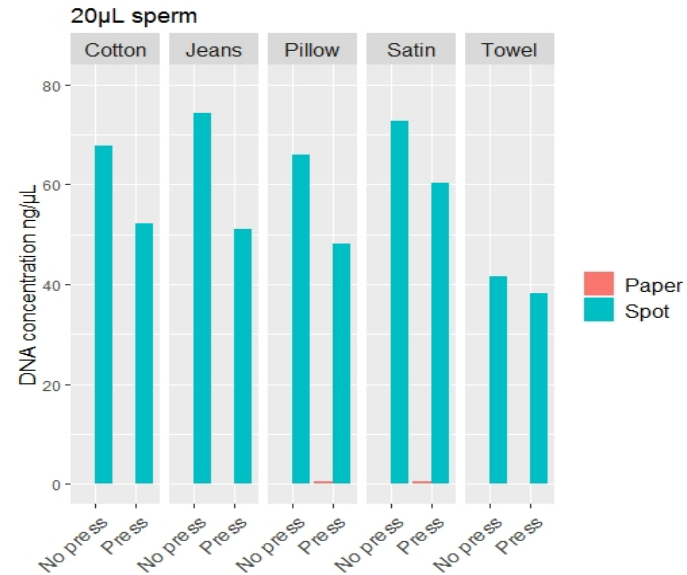
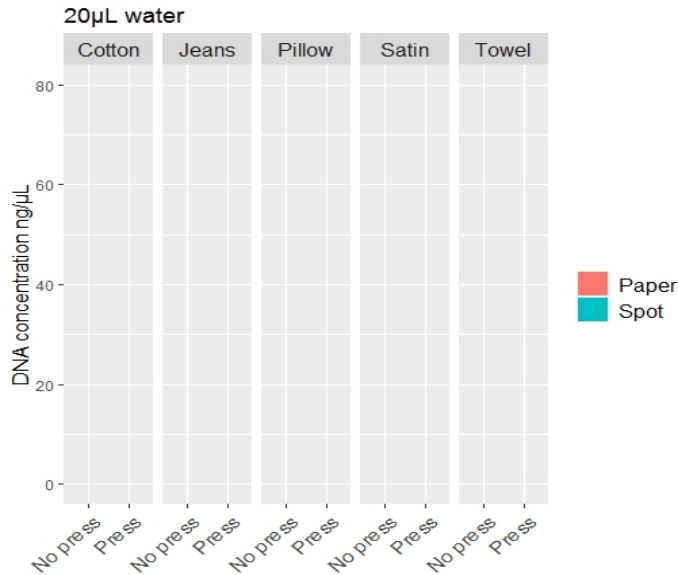
When using Sperm Tracker™ for semen stains localization, fabrics are directly brought into contact with the moisturized Sperm Tracker™ paper and kept 3 min under pressure before reading the fluorescent signal. The aim of the present study is to evaluate the possible loss of material at this pressure step (650Kg/m<sup>2</sup>) on several tissues of different composition or thickness (cotton, jeans, pillow, satin, towel).

## Materials & methods

For each tissue we used 6 replicated spots of 20  $\mu$ l sperm, 2  $\mu$ l sperm (data not shown), 20  $\mu$ l water to evaluate pressurized spots and transferred stains on the Sperm Tracker™ paper + one spot of 20  $\mu$ l sperm, 2  $\mu$ l sperm, 20  $\mu$ l water to evaluate non pressurized stains.



## Results



## Discussion

Results has allowed us to show that loss of material when using Sperm Tracker™ is most of the time insignificant and that especially whatever the volume of sperm or kind of fabrics tested, pressure step does not prevent from extracting enough DNA to perform genetic analysis.

## Conclusion

Sperm Tracker™ was shown to enable preservation of biological material on stained fabrics.