

SHEEP AND GOAT OOCYTES QUALITY ASSESSMENT FOR *IN VITRO* EMBRYO PRODUCTION

1. INTRODUCTION

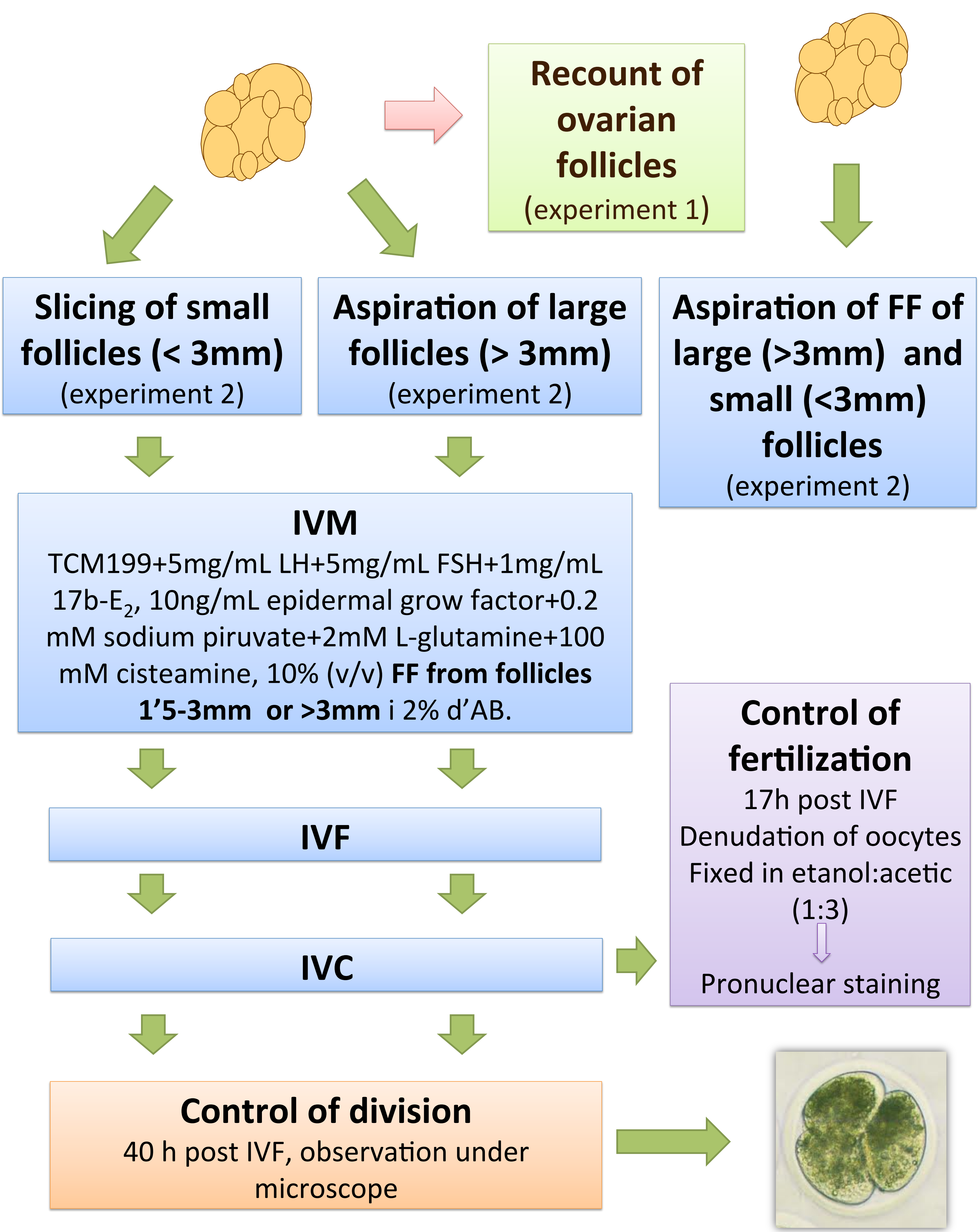
The *in vitro* embryo production allows the reproduction of females before puberty. Thus, shortening the generation interval genetic gain has improved significantly. Despite this, the oocytes obtained from prepubertal females are less competent for in vitro embryo production and also for gestations after transfer them to recipient female.

In order to improve *in vitro* embryo production, the addition of follicular fluid (FF) to IVM medium instead of serum has a stimulant effect on oocyte development (Sun *et al.* 1994).

2. OBJECTIVES

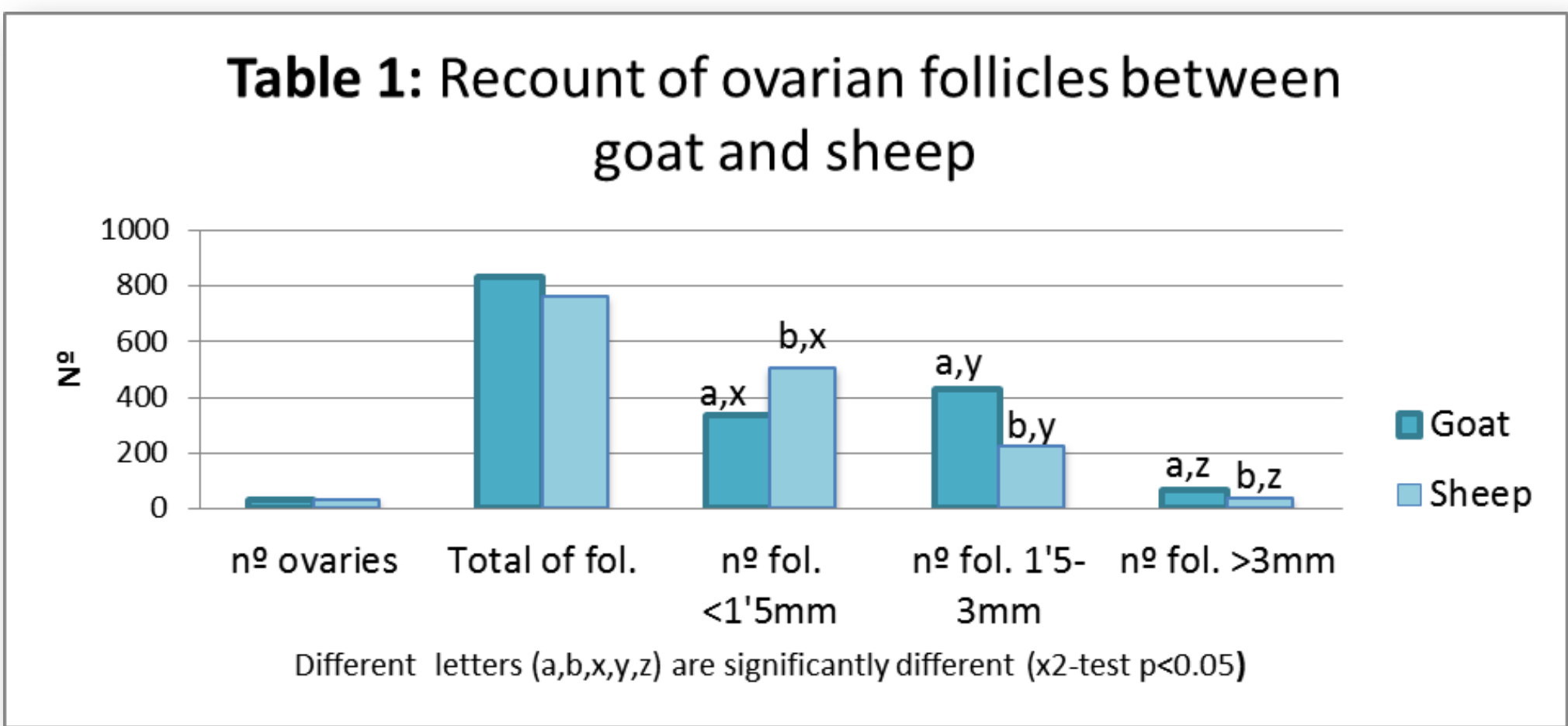
1. Compare ovarian follicles between goat and sheep
2. Study the effect of supplementing the IVM medium with FF from follicles of >3mm or <3mm

3. MATERIAL AND METHODS



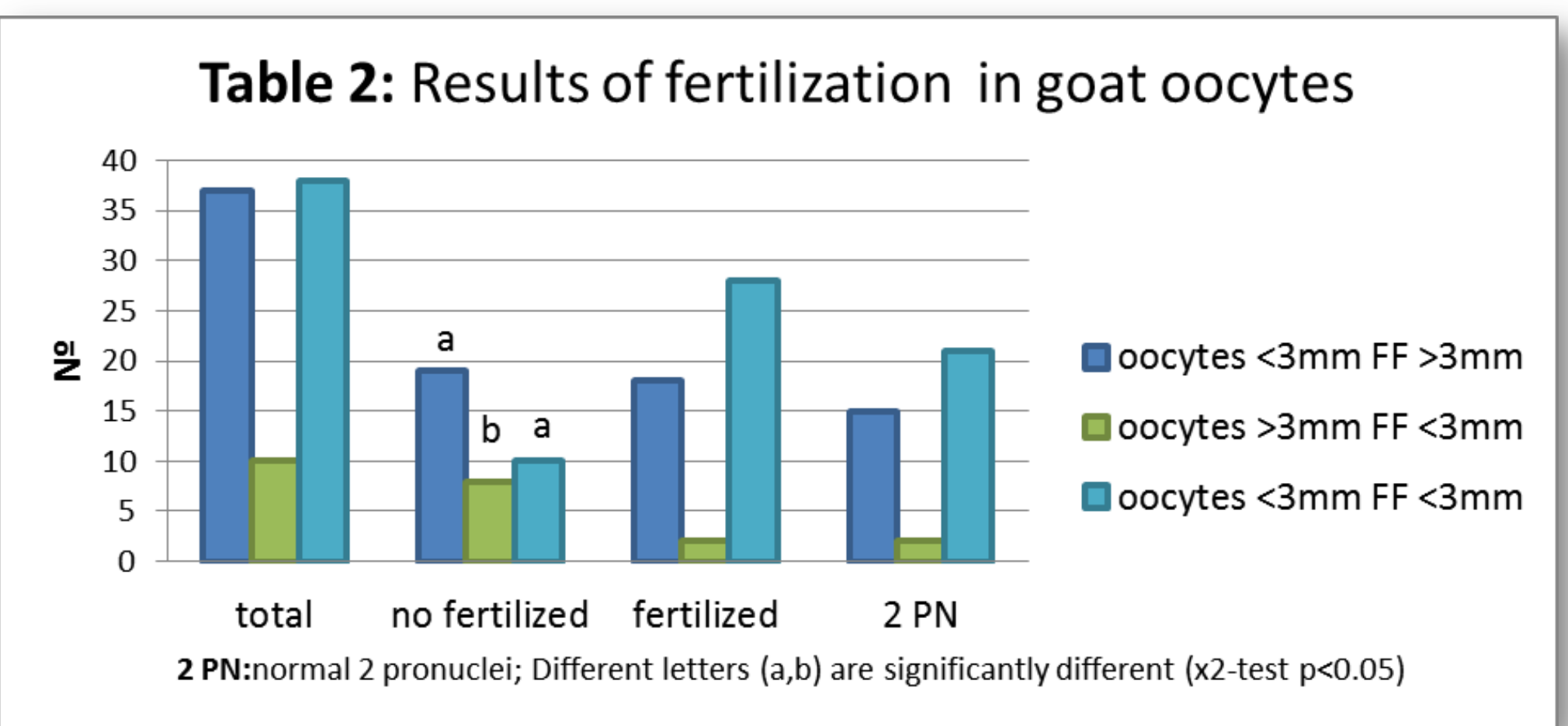
4. RESULTS

(Experiment 1)

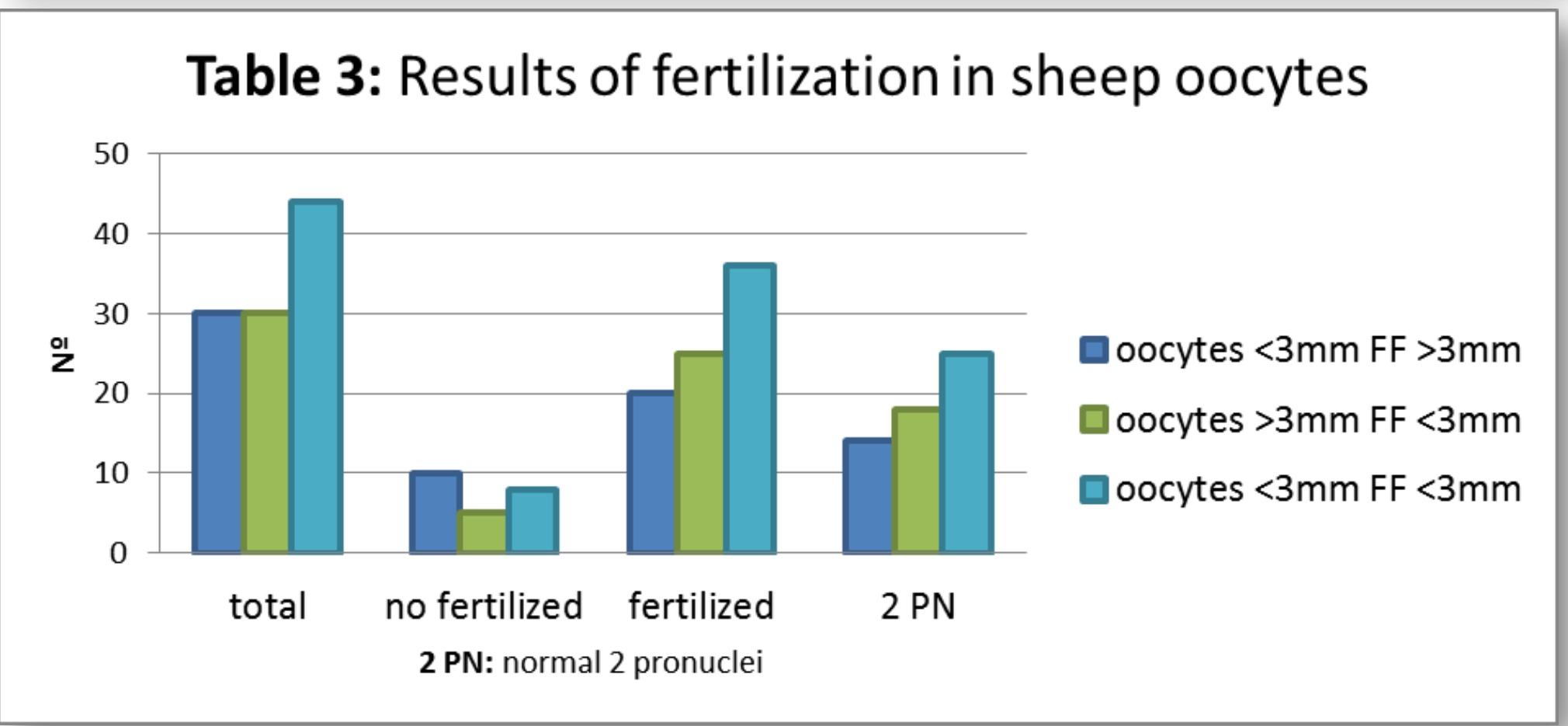


Comparing to goat, sheep has a larger number of smaller follicles. Goat has a higher number of total and large follicles (Table 1)

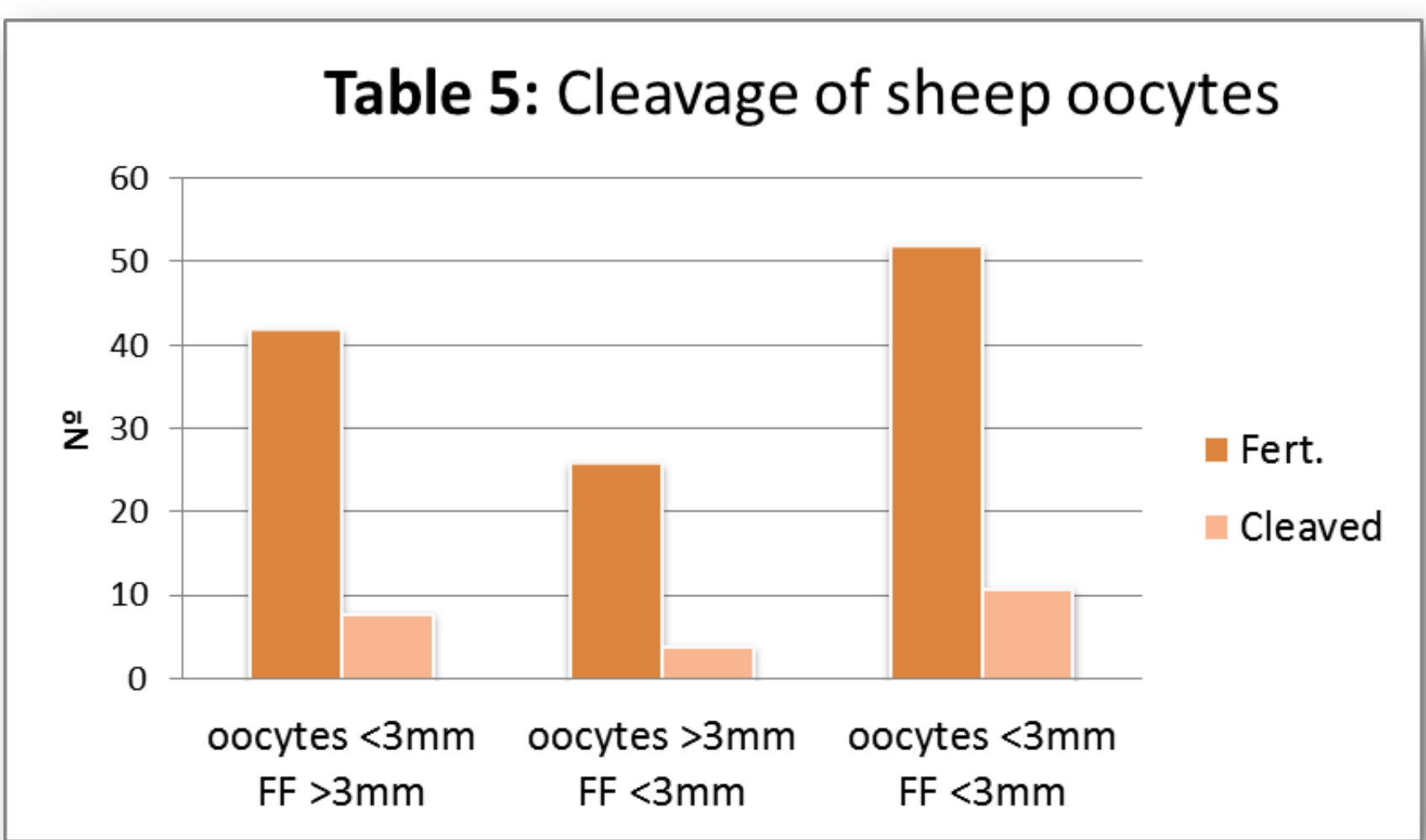
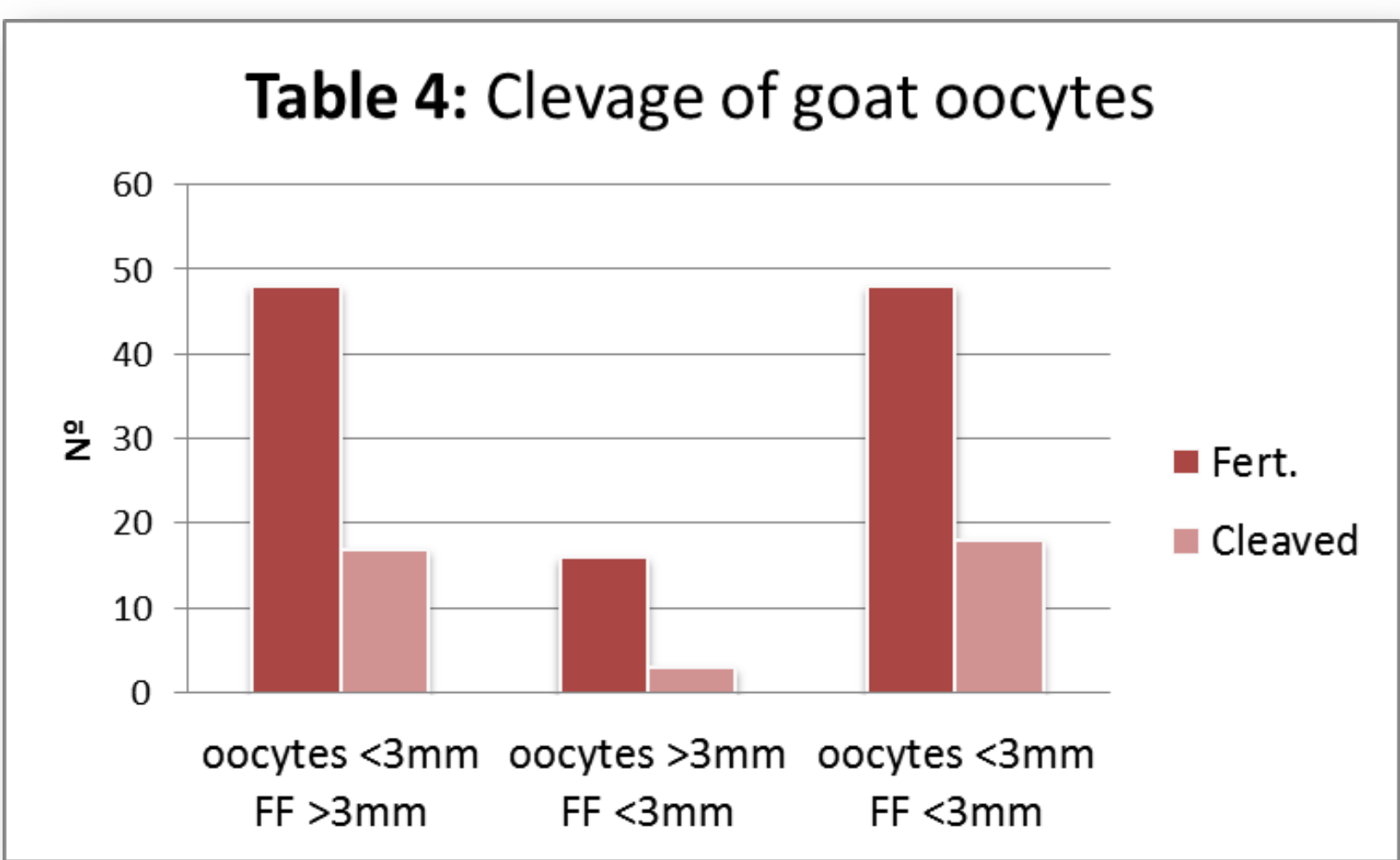
(Experiment 2)



Not significant differences were observed between larger and smaller than 3 mm oocytes although the percentage of fertilized oocytes was higher in oocytes from smaller than 3mm follicles matured with FF <3mm (Table 2, Table 3)



Not significant differences were observed between larger and smaller than 3 mm oocytes in spite of the percentage of cleaved oocytes also was higher in oocytes from follicles smaller than 3mm matured with FF <3mm (Table 4, Table 5)



5. CONCLUSIONS

1. Between goat and sheep, goat has a higher number of follicles larger than 3mm.
2. More studies of FF addition at IVM medium are needed to confirm the obtained results.

6. REFERENCES

Sun *et al.*, Theriogenology 41, pp. 981-988, 1994