

Impact of seeding distance between rows on stolons features in *Trifolium repens*

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Abstract: *Trifolium repens* (white trefoil) is an important perennial leguminous species from permanent and artificial pastures. White trefoil is usually cultivated in mixture with a grass species, respectively *Lolium perenne* because they are forming together a balanced source of forage from nutritional point of view. The research analyses the capacity of *Trifolium repens* to form stolons at different distance between rows at seeding. The research was performed at Research and Development Station for Sheep and Goats Breeding Caransebeș on an albic luvisol, pseudo-gleyic, low acid, moderate provisioned with phosphorus and potassium. The formation, growth and development of *Trifolium repens* stolons was assessed at every grazing cycle and after every cut. Also, there was assessed the plant height before every cutting or grazing cycle.

Results and discussions

• Material and method

The experimental factor considered was the distance between rows at seeding (12.5 and 25 cm). The assessed features for *Trifolium repens* were: length of the stolons in one kg pe plantă, number of nodes per plant and the distance between two nodes per plant. The measurements were done on 10 plants from every replicate of the three replicates.

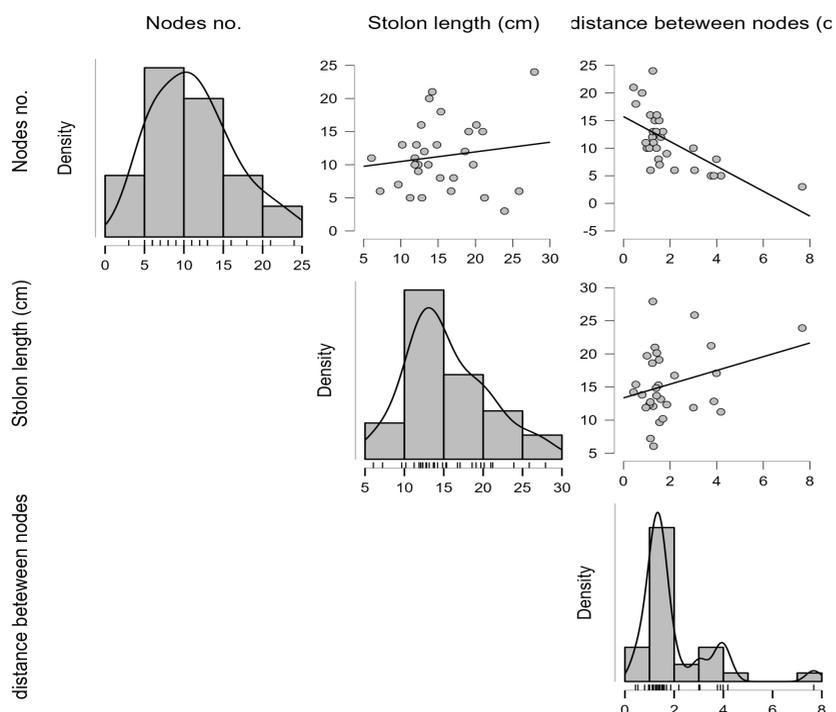


Fig.2. Descriptive and correlation plots (12,5 cm between rows)

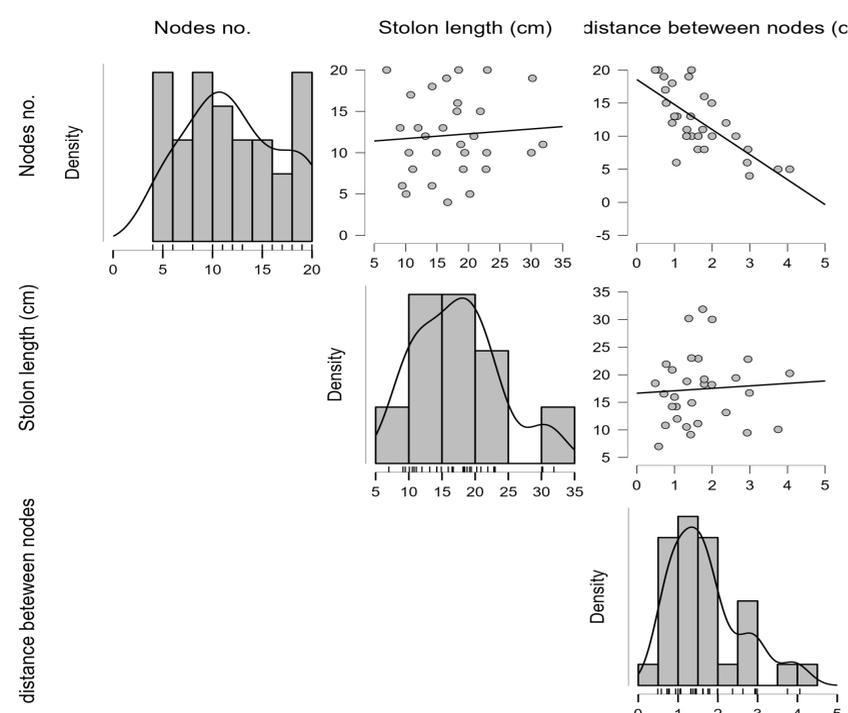


Fig.3. Descriptive and correlation plots (25 cm between rows)



Fig.1. Image from the field (photo original Vălușescu Daniela)

• Conclusions

The highly significant negative correlation between the number of nodes and the distance between nodes on a stolon highlights the fact that the increase of the nodes number determinates the decrease of the distance between nodes indifferent by the distance between the rows at seeding. There weren't identified significant correlations between nodes number and stolon length, and between stolon length and distance between nodes in both variants of distance between rows.

Statistical results suggest that the seeding of *Trifolium repens* at 12.5 or 25 cm between rows doesn't influence the analysed features of the stolons.