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Study on course of germinating , seedling and developing of Ceratoides seeds

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Key words : Ceratoides latens , seeds , germinating , seedling , developing

Introduction Ceratoides (*Ceratoides latens* (J.F.Gmel)) Reveal is half shrub in *Chenopodiaceae* . It is a good forages on northwest area and growth on hungeriness land fight against drought and cold . It is a important forage for livestock and help in winter and spring season . The experiment and investigation was undertaken seed germinating , seedling , rooting and developing of Ceratoides Seeds under the wildness and cultivation without irrigation . The results of experiment and investigation was supplied to open up and using the Ceratoides resource and protect environment ,to supply experience and scientific gist also .

Materials and methods Wildness and domesticated ,new and 1~2 year-old Ceratoides seeds . The experiment was put up at Ceratoides community where open country firstly fixed up six samples terra(1m×1m) . After one week,one month and three months observation the seedling,rooting and developing circs of seeds on the sample terra . At the same time mensurate 0~15cm floor of the soil hole and soil moisture . Finally analyze the sample result .

Devise are :A . Measure the burliness rate of Ceratoides fruits ; B . Measure biometry of the seeds under different storage time and condition ; C . Measure the germinating rate on the different temperature grads ; D . Measure the germinating and Seedling on the different soil moisture grads : E . Measure the germination and seedling on the different soil texture and seeding depth .

Results and discussion

Table 6 The result on Seedling and establishment of Ceratoides under different soil hole and different soil moisture condition .

Item	Samples terra number						
	1	2	3	4	5	6	7
Soil hole(%)	62.45	56.55	55.46	50.57	46.3	41.62	31.3
Soil moisture(%)	14.7	18.13	16.15	14.27	13.34	12.10	8.21
Plantlet number(S/m ²)	8	12	5	3	3	4	0
Rooting depth(cm)	14	14	12	8	6	4	0

From the results of experiment showed : The germination rate was low of fresh seeds but considerably heigher after six months storage . This shows that the Ceratoides seeds have a late ripe action ; The seeds storage for three years at the low temperature have germination rate , but storage under commonly used temperature for 18 months entirely disappear their germination . ; Under the low temperature(10℃)can germinate and seedling also , but slowly ; This explains that the Ceratoides seeds can be planted early spring that is high humid time ; Ceratoides seeds can normally germinate when soil humidity is 15% , which is lower than the alfalfa and vetch ; It can be seedling up in all textures of soil and seeding depth 1~2 cm ; After seedling , if soil hole is 41~62% and moisture over 12% ,the plantlet are rooting very well . The soil hole is lower than 40% ,and moisture lower than 12% ,the plantlet will not be able to rooting and develop property .

References

- Kurban Nizamidin , 1992 . Study on Methods of seedling establishment of Ceratoides under non irrigation condition . *August First Agricultural College Journal* (3) 82-84 .
- Li qing feng et . 1994 . Study on germinating examine standard of Ceratoides seeds and developing characterer of plantlet . *Grassland of Inner Mongolia Journal* (1) 72-78 .
- Sun xiang et . 1994 . Study on The root fasten Ceratoides . *Grassland of China Journal* (4) 21-26 .