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عنوان:

مطالعه اکولوژی و جوانه زنی بذور گیاهان دارویی آویشن باغی و آویشن دِنایی

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چکیده

مطالعات بیولوژی جوانه زنی گیاهان دارویی جهت توسعه‌ی استراتژی‌های مدیریت درازمدت، سودمند می‌باشند. در زمینه کاشت بذور گیاهان دارویی به علت حساسیت بالای برخی از این بذور نیاز است تا اطلاعات کاملی از نحوه کشت و ایجاد بستر جوانه زنی بذور داشته باشیم که در این زمینه اطلاعات کمی در اختیار کارشناسان امر می‌باشد. از این رو جهت شناخت ویژگی‌های اکولوژیک جوانه‌زنی بذور گیاهان دارویی آویش باغی و دنایی، آزمایشات جوانه‌زنی در قالب طرح بلوک کامل تصادفی با چهار تکرار در سال ۱۳۹۲ در آزمایشگاه دانشکده کشاورزی دانشگاه آزاد اسلامی واحد شهرکرد اجرا شدند. اثر دما بر جوانه زنی بذور در ژرمیناتور تحت نوسان دمایی ۱۵/۵، ۲۰/۱۰، ۲۵/۱۵، ۳۰/۱۵ و ۳۵/۲۰ درجه سانتیگراد شب/روز ، اثر شوری با استفاده از محلول‌های ۰، ۱۰، ۲۰، ۴۰، ۸۰، ۱۶۰ و ۳۲۰ میلی مولار کلرور سدیم و اثر اسیدیته با استفاده از محلول‌های بافر با اسیدیته تنظیم شده ۵ تا ۹مورد بررسی قرار گرفت. برای مطالعه‌ی اثر عمق دفن شدن بذر روی سبز شدن گیاهچه؛ بذور هر گیاه در اعماق ۰و۱/۵و۲/۵و۳/۵و۴/۵ سانتی‌متری قرار گرفتند. نتایج نشان داد که اثر دماهای مختلف بر درصد، سرعت و زمان رسیدن به ۵۰ درصد حداکثر جوانه‌زنی در هر دو گونه آویشن معنی-دار نبود. بطوریکه بالاترین درصد جوانه‌زنی آویشن باغی مربوط بود به دماهای متناوب ۲۵/۱۵ درجه سانتی‌گراد طی شب و روز با ۹۴ درصد طی روز و کمترین آن متعلق به دمای ۱۵/۵ درجه سانتی‌گراد با ۲۸ درصد طی روز و در دمای ۳۵/۲۰ صفر درصد طی شب بود. جوانه‌زنی آویشن دنایی در دمای متناوب شب و روز ۲۵/۱۵ درجه سانتی‌گراد با ۹۱ درصد جوانه‌زنی طی روز بیشترین میزان رو داشت ولی در سایر دماها بذر این گیاه دارویی جوانه‌زنی نسبتاً قابل قبولی داشت. افزایش شوری باعث کاهش درصد جوانه زنی هر دو گیاه شد. بطور کلی با افزایش عمق کشت از سبز شدن گیاهچه کاهش یافت. تیمار اسیدیته بر جوانه‌زنی اثر معنی‌داری داشت. کمترین و بیشترین درصد جوانه زنی آویشن باغی به ترتیب در اسیدیته ۹ با ۲۰ درصد و در اسیدیته ۷ با ۹۳ درصد و کمترین جوانه زنی آویشن دنایی در اسیدیته ۹ با ۱۹ درصد و بیشترین جوانه زنی در اسیدیته ۷ با ۹۴ درصد جوانه زنی مشاهده شد.

واژگان کلیدی: آویشن، اسیدیته، تنش شوری، جوانه‌زنی، دمای متناوب، عمق کاشت.

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Abstract

Biology of germination of medical plants management strategies to develop long-term is beneficial. In planting the Seeds of medical plants, Due to the high sensitivity of these seeds needed to complete information on how to grow and make seed bed germination which experts in the field have little information.Thus, to understand the ecological characteristics of *Thymus vulgaris* and T. *daenensis*, Germination experiments in a randomized complete block design with four replications in 2013 in Laboratory, Faculty of Agriculture, Islamic Azad University of Shahrekord was carried out. Effect of temperature on seed germination in germinator under fluctuating temperature 5/15, 10/20, 15/25, 15/30 and 20/35 ° C night / day, Effect of salinity by using solutions of 0, 10, 20, 40, 80, 160 and 320 mM NaCl and effect of pH using acid buffer solution was adjusted tuberoses were evaluated 5 to 9. To study the effect of seed planting depth on seedling emergence of seeds per plant at depths of 0, 1.5,2.5,3.5 and 4.5 cm were buried. Results showed that the effect of different temperatures on percentage, speed and time to reach 50% of maximum germination of T. *vulgaris* and T. *daenensis* was not significant, As the highest and lowest percentage T. vulgaris germination, respectively 15/25 (day/night) with a 94% and 5/15 (day/night) with 28% in day and Highest and lowest percentage of *T. daenensis* germination in temperature treatments respectively 15/25 (day / night) with a 91% and 5/15 (day/night) with 31% germination in day, But at other temperatures this herb seed germination was relatively acceptable. Increasing salinity reduces germination of both species. General emergence decreased with increased planting depth. PH treatments had significant effect on germination. Minimum and maximum germination of T. *vulgaris* at pH 9 with respectively 20% and 93% at pH 7, and lowest germination of T. *daenensis* at pH 9 with a 19% and the maximum germination at pH 7 with 94 germination were observed.

KeyWords: PH, germination temperature alternate, planting depth, salt stress Thymus.