

高,基部的种子成熟度低,千粒重低,依据 Hermann 研究的结果,扁穗冰草中部的种子成熟度高、休眠程度深,基部种子的成熟度低、休眠程度浅,故扁穗冰草籽穗中部种子的萌发力弱,基部种子的萌发力强;杂种冰草和蒙古冰草采种时为完熟期,已经完成后熟,籽穗中部千粒重较高,贮藏营养物质较多因而种子萌发力强,反之基部的萌发力弱。

参考文献

- [1] Bean E W. Seed quality: Its variation, control and importance in breeding and varietal assessments [R]. Welsh: Aberystwyth, 1973.
- [2] Anslow R C. Seed formation in perennial ryegrass II Maturation of seed [J]. J. Br. Grassld. Soc., 1964, 19 (3): 349-357.
- [3] 贺晓,李青丰. 小花位置对老芒麦和诺丹冰草种子质量的影响[J]. 草业科学,2005,22(7):37-40.
- [4] Hermann E M, Hermann W. The effect of Maturity at time of harvest on certain responses of seed of crested wheatgrass, *Agropyron cristatum* L. Gaertn [J]. J. Am. Soc. Agron., 1939, 31: 876-851.
- [5] 贺晓,李青丰,陆海平. 老芒麦、冰草结实特性的研究 [J]. 草业科学,2004,21(7):37-39.
- [6] 杜利霞,李青丰,刘义. 不同贮藏时间对牧草种子萌发特性的影响 [J]. 中国草地,2005, 27 (1): 17-21.
- [7] 胡卉芳,李青丰. 5 种禾本科牧草种子萌发特性及耐旱性的研究 [J]. 中国草地,2001,23(3):49-54.

Study on seed germination of three wheatgrass species in desert steppe

GAO Hai-juan, YUN Jin-feng, LIU De-fu

(College of Ecology and Environmental Science, Inner Mongolia Agricultural University, Hohhot 010019, China)

Abstract: The seed germination character of three wheatgrass species was studied and the results showed that germination percentage was higher indoors than outside. With the prolonging storage period, germination percentage, germination potential and germination index decreased. *Agropyron cristatum* was storage tolerant. Thousand-seed weight from top, middle and bases of panicle was positively correlated to anthesis order of the inflorescence. The vigor of the seeds from different part of panicle in *A. cristatum* × *A. desertorum* cv. Hycrest and *A. mongolicum* cv. Neimeng had positive correlation to thousand-seed weight, but *Agropyron cristatum* showed negative correlation.

Key words: wheatgrass; seed germination; desert steppe

全球气候变化使我国部分流域出现水资源短缺

据水利部消息,受全球气候变化的影响,近些年,我国部分地区降水发生变化,北方地区水资源明显减少。水利部相关负责人称:“北方部分流域水资源已从周期性短缺转变成绝对性短缺。”

近年来,受全球气候变化尤其是全球变暖的影响,暴雨和高温等极端天气频频出现在我国,洪涝、干旱、台风和沙尘暴等自然灾害出现频率与强度明显上升,对我国生态系统和社会经济产生了重大影响。

近 20 年来,我国地表水资源量和水资源总量变化不大,南方地区水资源总量有所增加,北方地区水资源总量明显减少,其中以黄河、淮河、海河和辽河地区最为显著。水利部相关负责人说,“我国黄河、淮河、海河和辽河地区地表水资源量比 20 年前减少 17%,水资源总量减少 12%,其中海河地区地表水资源量减少 41%,水资源总量减少 25%。”

(姚润丰)