

**McDonald, M. B.** 2002. A philosophy of dormancy testing in native species. *Seed Technology* 24:26-36.

### **Abstract**

Native species are entering the marketplace as new crops. Their popularity is due to the need to return disturbed environments back to the original species. These crops have intensely dormant seeds and few germination rules exist to accommodate the diversity of species. Of particular importance is how to test for dormancy in native species. This report describes how seed dormancy is imposed in native species by advocating a Dormancy Induction Window that explains how the intensity of dormancy varies from seed to seed in a seed lot. From this foundation, dormancy-breaking techniques found in the Rules for Testing Seeds are considered. The conclusion is that these techniques (exceptions are light,  $KNO_3$ ,  $GA_3$ ) are only partially successful in breaking dormancy and often cause reductions in seed germination and viability. As a result, it is recommended that native species be tested for viability with tetrazolium chloride (TZ) and a germination test excluding dormancy breaking techniques for determination of the planting value of the seed lot.