**Table 1.** Examples of studies that used assessment of seed viability and germination at the end of the experiment to estimate initial viability.

| Species tested | Method of determining initial viability from end-of-experiment data | Experimental conditions | Differing initial viability between treatments | Reference |
|---|---|---|---|---|
| 21 woody native species of Chilean matorral | Viability calculated as: those germinated during the monitoring period plus non-germinated seeds identified as viable by tetrazolium test | Moist absorbent paper in petri dishes at 20/10°C with 12/12 h light/dark for 36 d | Yes (3 species), but data not adjusted for viability | Gómez-González et al. (2017) |
| 13 native and one introduced species (*Acacia saligna*) of South African fynbos | Viability determined as the sum of germinated seeds and seeds appearing fresh on dissection of ungerminated seeds | 1% water agar at 10/20°C with a 12 h light and dark cycle for 91 d | Yes (at least 2 species) | Hall et al. (2017) |
| 65 species commonly occurring on New England tableland (NSW Australia) | Seeds that did not germinate, but looked viable, were analysed using tetrazolium test. Viability based on treatment with highest germination plus any seeds that remained dormant but viable | Moist pad in dish at 25/15°C with a 12/12 h light/dark for 28 or 56 d | Probably (as used highest viability levels between treatments) | Clarke et al. (2000) |
| *Asterolasia buxifolia,* riparian habitat of SE Australia | Embryo dissected from 20 seeds that did not germinate and viability confirmed if embryo and endosperm intact | Moist filter paper in petri dishes at 11/3°C with 12/12 h in light/dark for 77 d | Data not adjusted for viability* | Collette and Ooi (2017) |
| 33 herb and small shrub species in fire-prone Turkey | Embryo of seeds that did not germinate examined and viability confirmed if embryo intact | 0.8% agar in Petri dishes at 20°C in dark for 35 d | Data adjusted for viability | Serter Çatav et al. (2017) |
| 46 legumes species of tropical savanna, Brazil | Initial viability equals the sum of germinated and dormant seeds in control | Moist filter paper in petri dishes at 27°C with 12/12 h light/dark for 28 d | No data given at treatment level | Daibes et al. (2019) |
| 13 species of West African | Cut test – condition of embryo, | Moist filter paper in bell jars at 25°C light | No data given at | Dayamba et |

| | | | | |
|---|---|---|---|---|
| of grasslands and woodlands of SE Australia | seeds post-trial | light/dark for 56 d | treatment level | al. (2019) |
| 2 alien and 2 indigenous legume species in S African fynbos | Germination level of scarified seeds conducted at same time as other treatments | 0.02% benomyl solution in petri dishes at 20°C with 12/12 h light/dark for 30 or 60 d | No data given at treatment level | Jeffery et al. (1988) |
| 3 species of *Acronychia* in E Australian rainforest | Ungerminated seeds checked for firmness by pressing seed with forceps. Then firm seeds checked for viability via cut test | 0.8% water agar in petri dishes at 25/10°C with a 12/12 h light/dark for 28 d | No data given at treatment level | Liyange et al. (2020) |
| 9 herbaceous species in Brazilian grassland | Tetrazolium test on ungerminated seeds | Moist filter paper in petri dishes at 20°C or 25°C at 16/8 h in light/dark for 21 d | No data given at treatment level | Overbeck et al. (2005) |
| *Brassica napus* | Cotyledon condition of ungerminated seeds post-trial. Necrotic cotyledons = nonviable, yellow-milky cotyledons = viable | Moist filter paper in petri dishes at 20°C in dark for 35 d | No | Shayanfar et al. (2020) |

*Viability 80% at 100°C but only 65% at the lower temperature of 80°C appears anomalous and might indicate an unexpected treatment effect on viability (they should have been the same or the reverse if there was a heat effect on viability) but no statistical analyses were undertak