*Table 2:* Control techniques and their integration for grassland restoration.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Weed Treatment | Soil Alteration | Competition Establishment | Grazing Pressure | Reference | Location | Effect |
| Herbicide | N/A | Seed Addition | N/A | Cole & Lunt, 2005 | Australia | Low |
| Waller *et al*., 2016 | South Africa | High |
| Exclusion | O'Dwyer & Attiwill, 2000 | Australia | Moderate |
| Johnson et al. 2018 | Australia | Moderate |
| Mowing | Thomas *et al*., 2019 | South America | High |
| Clipping | Wilson & Partel, 2003 | Europe | High |
| Plant Plugs | N/A | Page & Bork, 2005 | North America | High |
| Exclusion | O'Dwyer & Attiwill, 2000 | Australia | High |
| Tillage | N/A | N/A | Waller *et al*., 2016 | South Africa | High |
| Seed Addition | N/A | Conrad & Tischew, 2011 | Europe | Low |
| Herbicide + Fire | N/A | N/A | N/A | Musil *et al*., 2005 | South Africa | Moderate |
| Mowing | Musil *et al*., 2005 | South Africa | High |
| Seed Addition | N/A | Prober *et al*., 2005 | Australia | High |
| Plant Plugs | N/A | Ansley & Castellano, 2006 | North America | High |
| Tillage | N/A | N/A | Waller *et al*., 2016 | South Africa | High |
| Exclusion | Waller *et al*., 2016 | South Africa | High |
| Seed Addition | N/A | Waller *et al*., 2016 | South Africa | High |
| Exclusion | Waller *et al*., 2016 | South Africa | High |
| Herbicide + Grubbing | N/A | N/A | N/A | Musil *et al*., 2005 | South Africa | Moderate |
| Herbicide + Leaf Litter Removal | N/A | Seed Addition | Exclusion | Johnson *et al*., 2018 | Australia | High |
| Fire | N/A | N/A | N/A | Musil *et al*., 2005 | South Africa | Low |
|  | Radloff *et al*., 2014 | South Africa | Low |
| Exclusion | Radloff *et al*., 2014 | South Africa | Moderate |
| Mowing | Musil *et al*., 2005 | South Africa | High |
| Tillage | Seed Addition | N/A | Waller *et al*., 2016 | South Africa | Low |
| Carbon Addition | Seed Addition | N/A | Prober *et al*., 2005 | Australia | High |
| Natural Recruitment | N/A | Hacker *et al*., 2011 | Australia | Moderate |
| Fertilizer | Natural Recruitment | N/A | Hacker *et al*., 2011 | Australia | High |
| Grubbing | N/A | N/A | N/A | Musil *et al*., 2005 | South Africa | Moderate |
| Scalping | Plant Plugs | Clipping | Tikka *et al*., 2001 | Europe | High |
| Grubbing + Leaf Litter Removal | N/A | Seed Addition | Clipping | John *et al*., 2016 | Europe | High |
| Fertilizer | Seed Addition | N/A | John *et al*., 2016 | Europe | Low |
| Leaf Litter Removal | N/A | Seed Addition | Exclusion | Johnson *et al*., 2018 | Australia | Low |
| N/A | N/A | N/A | Exclusion | Radloff *et al*., 2014 | South Africa | Moderate |
| N/A | Seed Addition | N/A | Tognetti & Chaneton, 2012 | South America | Low |
| N/A | Seed Addition | Clipping | Tognetti & Chaneton, 2012 | South America | High |
| Tillage | N/A | Mowing | Conrad & Tischew, 2011 | Europe | Low |
| Seed Addition | Mowing | Conrad & Tischew, 2011 | Europe | Moderate |
| Baasch *et al*., 2016 | Europe | High |
| Sengel *et al*., 2016 | Europe | High |
| N/A | Klaus *et al*., 2018 | Europe | Moderate |
| Scalping | Seed Addition | N/A | Cole & Lunt, 2005 | Australia | High |
| Scarification | Seed Addition | N/A | Cole & Lunt, 2005 | Australia | Low |
| Carbon Addition | N/A | N/A | Runwanza *et al*., 2013 | South Africa | Low |
| Seed Addition | N/A | Blumenthal *et al*., 2003 | North America | High |