

Figure 3: Change in climate suitability as indicated by the Ecoclimatic Index for *Ranunculus acris* subsp. *acris* in New Zealand due to irrigation [natural rainfall topped up to 4 mm day⁻¹ from early spring until mid autumn on irrigable land (Siebert et al. 2007)] under current climate. This map reveals that irrigation substantially increases the climatic suitability of the summer-dry eastern parts of the North and South Islands of New Zealand and areas in north-central Otago, the Waitaki River Valley and the Mackenzie Basin; the map regions shown in white are non-irrigable land. This may be interpreted as an increase in the risk that *R. acris* subsp. *acris* could establish and persist in dairy pastures in these eastern regions as a consequence of irrigation.

Reference

Siebert, S., P. Döll, S. Feick, J. Hoogeveen, and K. Frenken. 2007. Global Map of Irrigation Areas version 4.0.1. Available at <u>http://www.fao.org/nr/water/aquastat/irrigationmap/index10.stm</u>. Accessed November 15, 2011.