A seed vigor test for birdsfoot trefoil (Lotus corniculatus L.)
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The low vigour of the Lotus corniculatus L. seedlings causes a poor stand establishment of crops; therefore to plant high vigour seed of this perennial forage legume is recommended. No suitable procedure is available for the identification of seed lots based on this quality component. The design of a specific and practical method to estimate birdsfoot trefoil seed vigour is described here. Two seed lots from the cultivar San Gabriel with similar germination percentage and different chronological age were used to determine their germination capacities at 5°C for a 21-day period. The maximum seed germination difference between the two seed lots was detected after 7 d and subsequently decreased; thus 7 d was considered the appropriate time to assess the seed vigour. Germination after 7 d at 5°C was highly correlated (r=0.83-0.99**) with the soil seedling emergence. The evaluation of this procedure using 10 seed lots enabled the verification of its high discriminatory capacity to classify seed lots according to their potential planting value. As a result, this test is more sensitive and rapid than the standard germination test used to determine the quality of a seed lot. The vigour test described here is named birdsfoot trefoil vigour test.