



© Kamla-Raj 2017



Taylor & Francis
Taylor & Francis Group

J Hum Ecol, 57(3): 148-158 (2017)
DOI: 10.1080/09709274.2017.1305629

Indigenous Knowledge Coping Strategies against Hail Damage

S. P. Miya and A. T. Modi

University of KwaZulu-Natal, South Africa

KEYWORDS Climate Change. Seed Selection. Local Farmers. Maize. Seed Quality

ABSTRACT The study investigated the effect of simulated hail damage on maize seed quality combining agronomy, laboratory analysis of seed quality and traditional knowledge of subsistence farmers. Three popular maize cultivars grown at two locations and farmer traditional knowledge about seed quality was determined at three different locations. The study found that there are significant genotype and site differences with respect to response to hail damage. Crop management manipulation by varying plant population was found to be important. The local knowledge of farmers correlated with scientific results of seed quality. Indigenous knowledge used in climate change adaptation included; changing the choice of crop and variety, planting, weeding and harvesting periods, shifting from rain-fed to irrigated agriculture and adopting tolerant and early yielding crop cultivars. The findings of this study can be used to relate traditional systems of maize production to select planting dates to mitigate hail damage effects of climate change.