

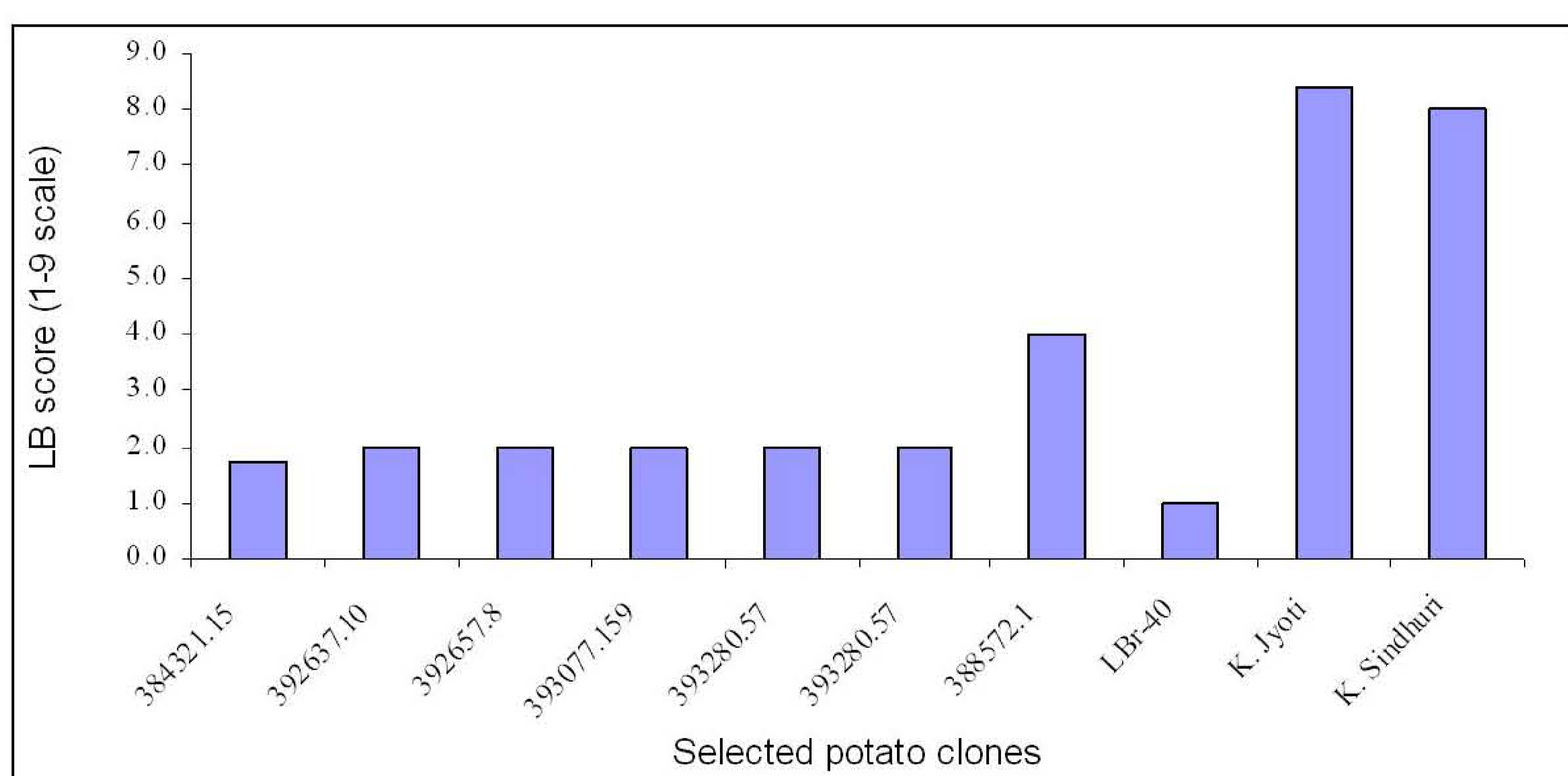
# Identification of Potato Clones Resistant to Late Blight under Terai and Mid Hill Conditions of Nepal

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**Background:** Late blight (*Phytophthora infestans*) is an economically important disease of potato in Nepal. Screening of breeding materials for late blight resistance under different agro climatic conditions is one of the most important activities of potato research prior to advance yield evaluation or release of varieties for commercial production.

**Methods.** In 2006 and 2007 potato clones were screened at Parawanipur (Terai 115 m a s l), Sharadnagar (inner Terai 270 masl) and Khumaltar (mid hill 1360 m a s l) under natural epiphytotic conditions. Late blight susceptible potato varieties were planted after each nine test rows to increase the inoculum pressure on the test clones.

**Results:** Several CIP clones, 392657.8, 384321.15, 392637.10, 393280.57, 393077.159 and LBr 40 were found consistently resistant to late blight over both years under different agro climatic conditions (Figure below). Eleven materials bred by the national program were also resistant with severity values of 2-3.



Values represent average of all trials (1= R; 9 = S)



Picture 1. Late blight screening at Khumaltar



Picture 2. Late blight screening in at Sharadanagar



Picture 3. Farmers harvesting LB resistant potato clones at Sharadanagar