# Radiation capture and use by morphologically and physiologically contrasting maize-pea cultivars in sole and and intercropping systems. (A06-kanton084317-Oral)

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## Abstract:

Sole and intercrops of two morphologically and physiologically contrasting maize and pea were grown in 2001 at the Field Unit of the School of Plant Sciences of The University of Reading. Radiation absorption was measured using Light capture by the sole and intercrops was measured using a Sunfleck Ceptometer (Delta T Devices), with a sensor length of 80 cm. Cumulative radiation use efficiency (CRUE) representing radiation use from emergence to date were calculated. Sole pea had the lowest CRUE, sole maize and the intercrops had similar CRUE. Radiation absorption was partitioned into the component crops using leaf area and extinction coefficient. The CRUE of the intercrop peas was always higher than the sole crop, as did maize cultivar Nancis whereas maize cutivar Sophy showed little response.

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