

**CORRELATION STUDY ON GREEN PEA
(*Pisum sativum L.*) GROWN UNDER IRRIGATION IN
SAMARU, ZARIA**

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ABSTRACT

The success of any yield improvement strategy requires the knowledge on how the various traits interact to influence the final yield, especially for crops that are introduced into a new environment. Correlation study was undertaken on green pea (*Pisum sativum L.*) in the 1994/95 and 1995/96 dry seasons at Samaru, Northern Guinea savanna of Nigeria. Data were taken from an experiment that consisted of factorial combinations of four levels of N (0,30,60 and 90 kg N/ha) and four P levels (0,13,26,39 kgP/ha) laid in a randomized complete block design with four replicates. Results show that seed yield was positively correlated with all the growth and yield characters studied. Vine length, leaf and index (LAI) and number of pods and seed weight had the greatest direct/indirect effect on yield. Haulm weight had negative direct and indirect effect on yield in 1994/95. Pod number and LAI made the maximum percent sole contribution to seed yield, followed by number of seeds in both seasons, haulm weight in 1994/95 and vine length in 1995/96. Joint contributions by LAI and number of pods with the other parameters were also high, except with haulm weight in 1994/95.

Keywords: Correlation, green pea, irrigation.