**Character Association and Path Analysis in Indian Garlic (*Allium sativum*** **L**.**) Accessions using Agro-Morphological traits**

**Shivam Sharma[[1]](#footnote-1)\*, D.R. Chaudhary1, Neha Sharma1, Harish B.M.**

1 Department of Vegetable Science and Floriculture, CSK HPKV, Palampur, HP-176062, India

\* Corresponding author email: shivamsharma7154@gmail.com

**ABSTARCT**

Character association and path analysis in 25 genotypically diverse indigenous accessions of garlic (*Allium sativum* L.) were evaluated at Vegetable Farm, CSK HPKV Palampur, for 17 agro-morphological quantitative traits namely, plant height, leaves per plant, leaf length, leaf width at middle portion, pseudo stem length, pseudo stem diameter, bulb polar diameter, bulb equatorial diameter, cloves per bulb, clove weight, clove length, clove polar diameter, clove equatorial diameter, total soluble solids, bulbils per plant and bulb yield per plant. In general, the estimates of genotypic correlations, were higher than their respective phenotypic correlations for all the traits studied, indicating inherent relationship. Bulb yield per plant displayed significant positive correlation with bulb equatorial diameter, clove weight, clove equatorial diameter, pseudo stem diameter, clove polar diameter, bulb polar diameter, clove length, leaf length, leaf width at middle portion, plant height and leaves per plant indicated that selection based on these traits would be more effective. Path coefficients studies revealed that clove weight, bulb equatorial diameter, clove polar diameter, leaf length and clove equatorial diameter were the important traits for direct selection of bulb yield as these traits had high direct effects and significant positive correlation with bulb yield per plant. These traits can be considered as the best selection indices for increasing the bulb yield.

Keywords*:**Garlic, correlation, path coefficient*

**COVER LETTER**

Dr.Shivam Sharma

Ph.D. (Vegetable Science)

CSK HPKV Palampur, India

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I wish to submit an research article entitled “***Character Association and Path Analysis in Indian Garlic (Allium sativum L.) Accessions using Agro-Morphological traits*”** for consideration by “Madras Agricultural Journal”.

In addition, we have no conflicts of interest to disclose. Please address all correspondence concerning this manuscript to me at [shivamsharma7154@gmail.com](mailto:shivamsharma7154@gmail.com).

Thank you for your consideration of this manuscript.

Sincerely,

Dr. Shivam Sharma

Ph.D. (Vegetable Science)

CSK HPKV, Palampur, India

1. \* Corresponding author email: [shivamsharma7154@gmail.com](mailto:shivamsharma7154@gmail.com) [↑](#footnote-ref-1)