Chitwan-based studies on seed priming have similarly reported significant genotype-linked variation in germination and yield traits. In Morang district, cultivation-method trials have documented distinct growth and yield responses of okra to spacing and mulching practices under the local subtropical climate (Shreevastav et al., 2023).

Although these studies confirm that okra varieties respond differently depending on the growing environment, systematic, comparative information on okra varietal performance specific to the Chakarghatta area of Sarlahi district remains lacking. Sarlahi lies in the Terai agroecological belt, which differs in soil type, temperature regime, and rainfall pattern from Chitwan and Morang where the above trials were conducted. Because varietal response to growth and yield traits is strongly influenced by local agroecological conditions, findings from these other regions cannot be reliably extrapolated to predict variety performance in Sarlahi. This creates a clear need for location-specific varietal evaluation before any variety can be confidently recommended to farmers of this region.

Therefore, the present study was undertaken to evaluate the growth, flowering, and yield performance of different okra varieties under the agroclimatic conditions of Chakarghatta, Sarlahi, with the objective of identifying variety best suited for higher productivity in this region. It is expected that the findings will provide farmers and extension agencies in Sarlahi with reliable, location-specific varietal recommendations and contribute to filling the existing information gap on okra variety performance in this agroecological zone.

2 Materials and Methods

2.1 Experimental site

The research was conducted in the farmer's field in Chakarghatta rural municipality, Khoriya, Sarlahi district, Madhesh province. This region lies in Terai of Nepal covering area of 25.16 Square Kilometer. Sarlahi district is in latitude 26°58'08.04" North and 85°34' 06.24" East longitudes. The research site was located at Chakarghatta rural municipality, Khoriya, Sarlahi. The average highest and lowest temperature is 37.3 °C and 12.03 °C. The soil type of this area is Sandy loam, moderately acidic in soil reaction.

2.2 Research detail

The experiment was conducted in randomized complete block design (RCBD) with seven treatments and three replications (Table 1). All together there were 21 plots, each plot containing 4 rows and 5 plants per row. Each plot contained 20 Plants where inner 5 plants was selected as sample. Net experiment plot was 3.5 meter square, having spacing of 0.5 m between treatment and 1m between replications. Total area for research was 110.5 meter square. The spacing between row to row is 50 centimeter and plant to plant is 30 centimeter. Recommended dose of fertilizer is applied in the field (118:79:39 NPK kg/ha), 0.43 kg of potassium and 0.86 kg phosphorous and 0.65 kg of nitrogen was applied during sowing time and remaining dose of Nitrogen (0.32 kg) was applied at two split doses. Weeding was carried out and irrigation was done at weekly interval.

Table 1 Treatment consists of seven different varieties

S. N	Treatment
1	Arka Anamika
2	Selection no. 07
3	Bhindi F1
4	Rohini
5	Super Anamika
6	NOL 303 Julie
7	Swaraj pan 2155

2.3 Data collection

From each experimental plot randomly 5 inner plants were selected for data collection. Tagging of plants were done using colorful plastics. Plant height and number of leaves were recorded from randomly selected 5 plants at