



Figure 5 Different flower shapes of the *Phalaenopsis* orchid

4.3 Impact of trait variation on market positioning

Variation in *Phalaenopsis* traits directly determines market positioning and product stratification. Different combinations of flower color, morphology, and plant architecture correspond to specific consumption scenarios and price segments, forming the basis for effective market segmentation (Gabellini and Scaramuzzi, 2022). In high-end gift markets, cultivars with large flowers, pure colors, and well-structured forms are preferred, particularly white or light-colored *Phalaenopsis*, which are widely used in weddings and formal occasions due to their strong cultural symbolism (Han et al., 2025).

In mass consumer and home gardening markets, trait preferences emphasize practicality and cost-effectiveness. Small-flowered, highly branched, and high-flower-number cultivars are more suitable for household display due to their compact form and abundant visual effect. At the same time, cultivars with self-supporting inflorescences and stable flowering performance are better suited for supermarkets and retail chains, where product uniformity and transport durability are critical (Pramanik et al., 2022).

Bicolored, patterned, and novelty cultivars are primarily targeted at differentiated and high-value markets. These products exhibit strong visual identity in both color and structural traits, catering to collectors and consumers seeking unique or personalized products (Badriah et al., 2024). For example, the strong consumer performance of Puspita Devi Agrihorti demonstrates that the combination of rich coloration and high flower number can establish