

Bidi Tobacco Hybrid 2 (GABTH 2) for irrigated regions of middle Gujarat

Gujarat Anand Bidi Tobacco Hybrid 2 (GABTH-2) is a high-yielding *bidi* tobacco hybrid by the *Bidi Tobacco Research Station*, Anand Agricultural University, Anand and Gujarat. This variety was specifically bred to cater to the irrigated regions of middle Gujarat, including areas such as Anand, Kheda and Vadodara district, where bidi tobacco cultivation is a significant component of the local agricultural economy.

One of the key features of GABTH-2 is its superior yield performance. It produces an average cured leaf yield of >3900 kg/ha, which is about 17 percent higher than the existing hybrid check, MR GTH-1. This significant yield advantage makes it a commercially attractive option for tobacco farmers seeking better productivity. In terms of growth characteristics, GABTH-2 is categorized as a medium-to-late maturing hybrid. The plants are known to bear a greater number of leaves, which is a beneficial trait for bidi production, where leaf quantity and quality are both crucial.

The cured leaves of this hybrid exhibit desirable traits such as good spangling and puckering. These leaf characteristics are especially important in bidi tobacco, as they contribute to both visual appeal and smoking quality. Additionally, the chemical composition of the cured leaf in GABTH-2 is on par with that of MR GTH-1, ensuring that the quality remains consistent with market standards. Feedback from traders and processors also supports its acceptance in the market due to its satisfactory smoking properties.

Another notable advantage of Gujarat Anand Bidi Tobacco Hybrid 2 is its resistance to major tobacco diseases. It shows field resistance to root-knot nematodes, mosaic virus, and leaf curl disease—common threats in tobacco-growing regions. This disease resistance reduces the need for chemical controls and contributes to lower production costs and reduced crop loss risk.

Agronomic trials conducted over multiple years have also indicated that GABTH-2 responds well to optimal nitrogen application and these findings suggest that careful management practices can further enhance its productivity and profitability. The release of GABTH-2 represents a significant advancement bidi tobacco yield improvement in Gujarat. Its high yield potential, disease resistance, and acceptable leaf quality make it a preferred choice for farmers in irrigated tobacco-growing regions of Gujarat. GABTH-2 offers a promising option for enhancing both yield and quality in *bidi* tobacco cultivation.



Field crop of GABTH-2