

## Natural Binder-Based Amoxicillin Composition for Reduced Dosage

Technology Domain: Pharmaceutical

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Status (Patent/TRL): Patent Pending / TRL 4

### Technology Summary:

This invention introduces a novel pharmaceutical composition that delivers enhanced therapeutic efficacy at a reduced dosage, along with its production method. The core technical solution lies in combining a bioactive substance (like Amoxicillin) with a plant-based binder, specifically an extract of *Ipomoea staphylina*, which inherently possesses antibacterial properties.

This innovative approach allows for a significant reduction in the drug's dosage (e.g., from conventional 500-1200 mg to 150-250 mg), minimizing side effects and environmental impact associated with synthetic excipients. Pre-formulation and quality control studies have confirmed the composition's excellent compatibility, stability, and consistent performance, including rapid drug release. This makes the invention a safer, more cost-effective, and eco-friendly alternative for therapeutic applications, particularly for antibiotics.

