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(57) Abstract :
The present invention provides a weather forecasting system (1) that integrates several key components, including a location determination unit (2) for geo-coordinate identification, a location-based data retrieval unit to fetch area-specific details, and a weather-based data retrieval unit for extracting pertinent weather information. Coupled with an agricultural data processing module (8) comprising an input module (6) to collect crop-related details, a retrieval module for accessing crop-specific data from various sources, a data processing module (8) for analysing crop-specific data to identify correlations and weather impacts, and a prediction module (9) to forecast crop growth using numerical weather prediction techniques. A display module (10) presents the crop growth forecasts to users in a user-friendly format. This comprehensive system combines meteorological data with agricultural insights to provide valuable crop growth predictions.

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