

AGRO - INTELLIGENT

Crop Recommender - Fertilizer Advisor - Crop Yield Prediction

Get Started



Crop Recommender

Crop Recommender is used to recommend the sowing crop based on the weather and soil parameters

[Crop Recommender](#)

Fertilizer Advisor

Fertilizer Advisor is used to advice how to use fertilizer based on the crop and soil parameters

[Fertilizer Advisor](#)



Crop Yield Predictor

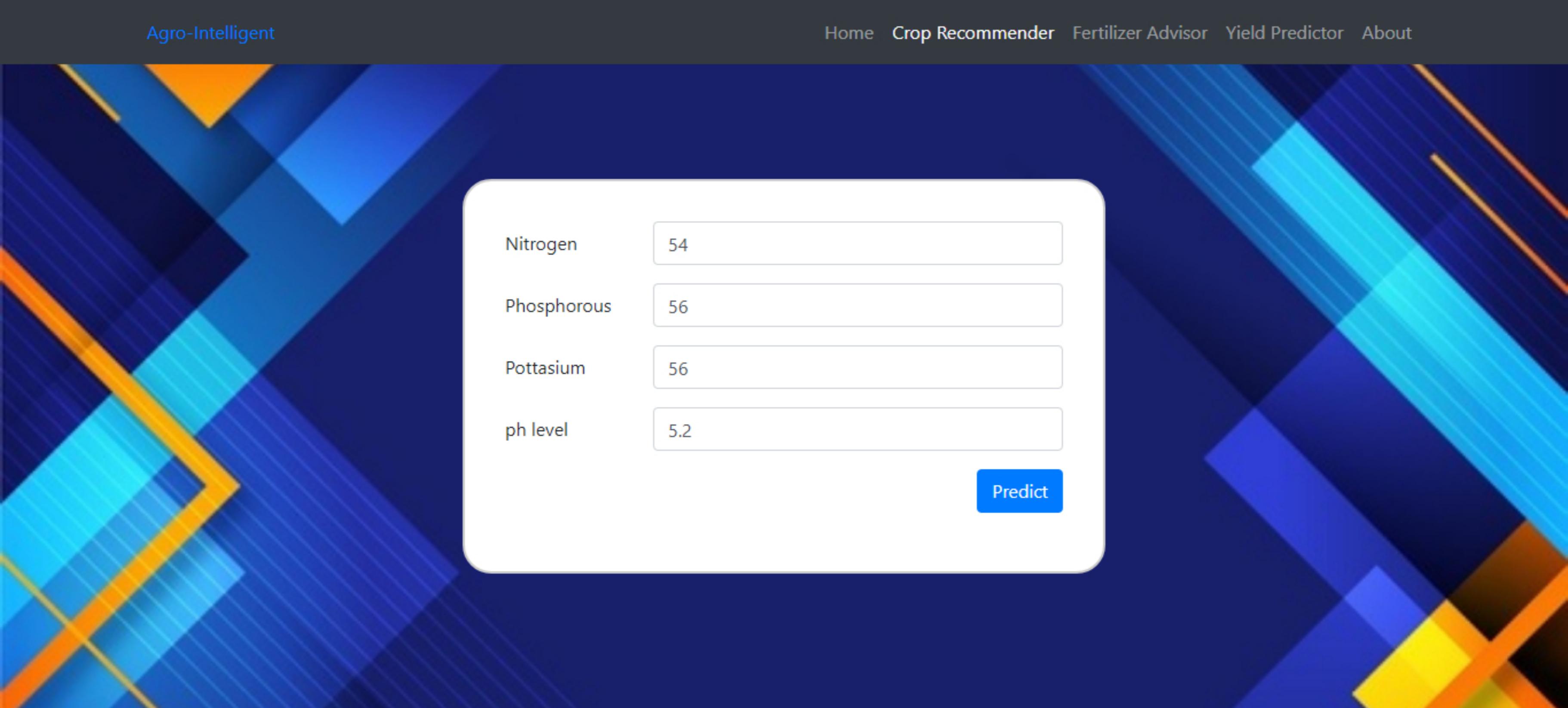
Crop Yield Prediction is used to predict the crop yield based on crop, weather and soil parameters

[Yield Predictor](#)

Agro-Intelligent

Crop Recommender - Fertilizer Advisor - Crop Yield Prediction

© Copyright 2021 HICET



Nitrogen

Phosphorous

Pottassium

ph level

Predict

Agro-Intelligent

Crop Recommender - Fertilizer Advisor - Crop Yield Prediction

© Copyright 2021 HICET

Nitrogen

Phosphorous

Potassium

ph level

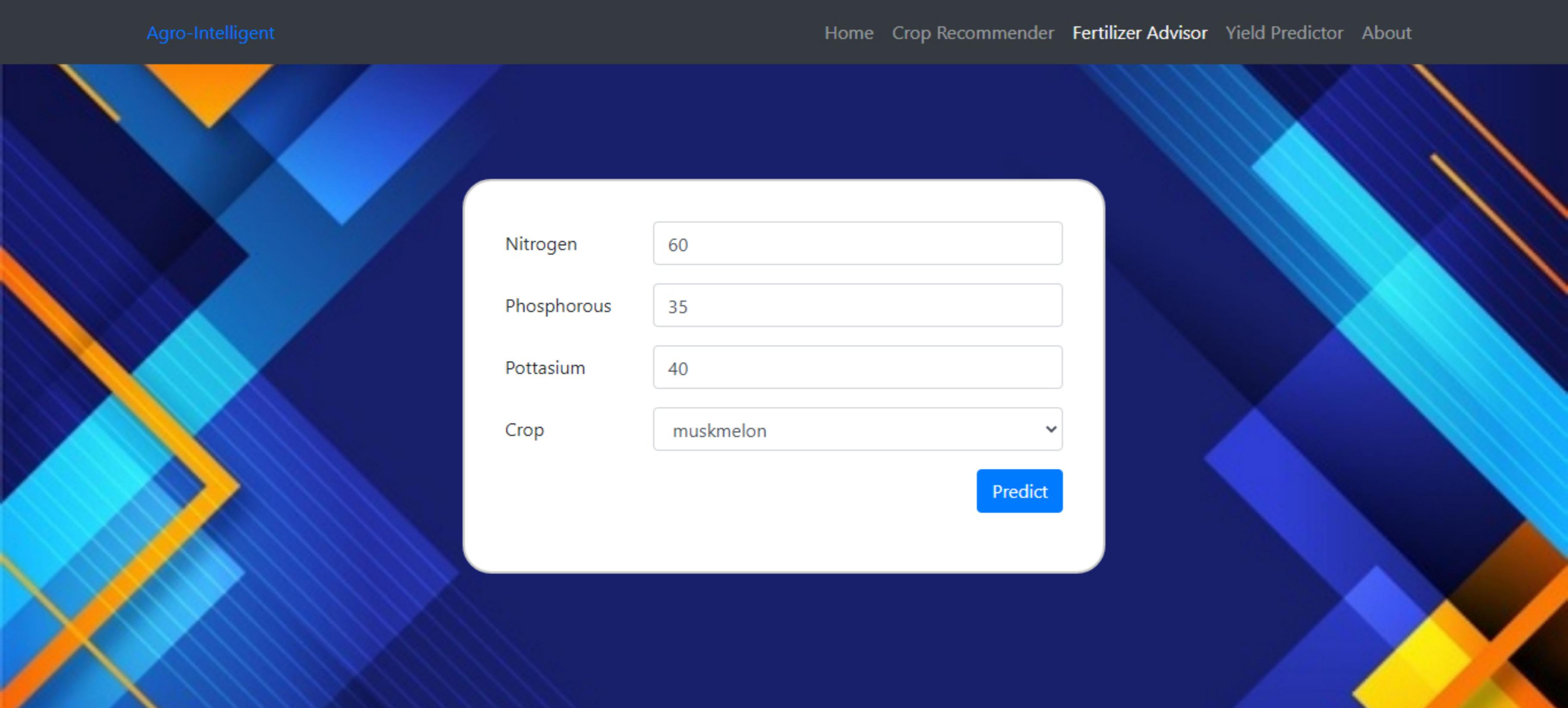
Predict

**You should grow papaya
in your farm**

Agro-Intelligent

Crop Recommender - Fertilizer Advisor - Crop Yield Prediction

© Copyright 2021 HICET



Nitrogen

Phosphorous

Pottassium

Crop ▼

Predict

Agro-Intelligent

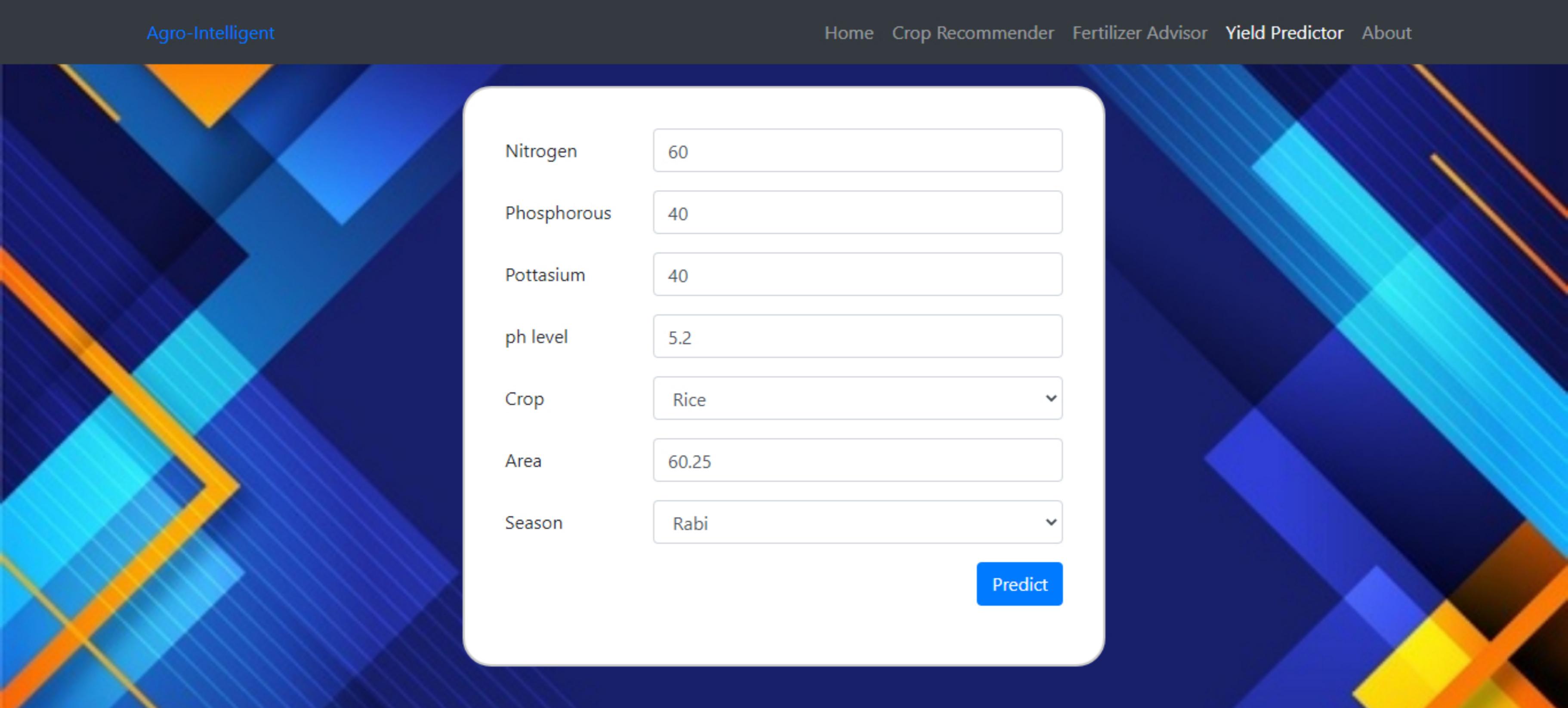
Crop Recommender - Fertilizer Advisor - Crop Yield Prediction

© Copyright 2021 HICET

The N value of your soil is low.

Please consider the following suggestions:

1. *Add sawdust or fine woodchips to your soil* – the carbon in the sawdust/woodchips love nitrogen and will help absorb and soak up and excess nitrogen.
2. *Plant heavy nitrogen feeding plants* – tomatoes, corn, broccoli, cabbage and spinach are examples of plants that thrive off nitrogen and will suck the nitrogen dry.
3. *Water* – soaking your soil with water will help leach the nitrogen deeper into your soil, effectively leaving less for your plants to use.
4. *Sugar* – In limited studies, it was shown that adding sugar to your soil can help potentially reduce the amount of nitrogen in your soil. Sugar is partially composed of carbon, an element which attracts and soaks up the nitrogen in the soil. This is similar concept to adding sawdust/woodchips which are high in carbon content.
5. Add composted manure to the soil.
6. Plant Nitrogen fixing plants like peas or beans.
7. *Use NPK fertilizers with high N value.*
8. *Do nothing* – It may seem counter-intuitive, but if you already have plants that are producing lots of foliage, it may be best to let them continue to absorb all the nitrogen to amend the soil for your next crops.



Nitrogen

Phosphorous

Potassium

ph level

Crop

Area

Season

Predict

Agro-Intelligent

Crop Recommender - Fertilizer Advisor - Crop Yield Prediction

© Copyright 2021 HICET

Nitrogen

Phosphorous

Pottassium

ph level

Crop

Area

Season

Predict

Yield:77 Production/KGs

Agro-Intelligent

Crop Recommender - Fertilizer Advisor - Crop Yield Prediction

© Copyright 2021 HICET

Agro-Intelligent

Agro-Intelligent is a Machine Learning based Web application. It is used for some farming strategy such as Recommending the sowing crop based on Soil and Weather parameters, How to use the fertilizer using the soil parameter and Prediction of crop yield based on the weather, crop and soil parameters by production per Kilograms.

Crop Recommender

Crop Recommender is used to recommend the sowing crop based on weather and soil parameters. Consider the soil factor like Nitrogen, Phosphorous, Potassium, soil pH value and Weather parameters like Rainfall, temperature, moisture and humidity. We use open weather API to get the current value of Rainfall, moisture, humidity by getting parameters like State and City. After applying the different machine learning algorithms for the dataset, the machine learning algorithm Random forest classifier shows the best accuracy score almost 99.986%. we trained model by using Random forest classifier algorithm for crop recommending model. This model will be saved, and the farmers can easily get the sowing crop recommending by giving their farmer soil type characteristics, top soil and pH as the input to the system,etc.

Fertilizer Advisor

Fertilizer Advisor is used to advice how to use fertilizer based on crop and soil parameters. Consider the soil factor like Nitrogen, Phosphorous, Potassium, soil pH value and crop. Based on the soil value it will say the fertilizer and how to use it. So farmer's or any person who want to cultivate ,can easily get information about the fertilizer.

Yield Predictor

Yield Predictor is used to Predict the crop yield . Consider the soil factor like Nitrogen, Phosphorous, Potassium, soil pH value and Weather parameters like Rainfall, temperature, moisture and humidity. We use open weather API to get the current value of Rainfall, moisture, humidity by getting parameters like State and City. After applying the different machine learning algorithms for the dataset, we trained models of the crop recommending model. Based on Mean Absolute error, Random Forest machine learning algorithm shows the low MAE value. Crop yield which will use the Random Forest Regression machine learning algorithm to trained the model and test the model. Which will outcomes the best accuracy score as 97.7654325897. So the farmers can easily get the crop yield prediction by giving their farmer's soil type characteristics, top soil and pH as the input to the system,etc.