Highlights

- Regression models are employed to forecasting COVID-19 cases in the Brazilian context;
- Data from ten states with a high incidence of COVID-19 are adopted;
- Models for multi-step-ahead forecasting are evaluated;
- \bullet Out-of-sample forecasting errors lower than 6.9% are achieved by best models;
- SVR and stacking ensemble are the most suitable tools to forecasting COVID-19 cases in the evaluated scenarios;