# Article information:

Starch, cellulose and plant extracts as green inhibitors of metal corrosion: a review | SpringerLink
<https://link.springer.com/article/10.1007/s10311-022-01400-5>

# Article summary:

1. Traditional corrosion inhibitors used in metal protection contribute to environmental pollution, leading to the development of green corrosion inhibitors.

2. Starch, cellulose, and other plant extracts have shown potential as effective and environmentally friendly corrosion inhibitors.

3. However, there are challenges in applying these green inhibitors to industrial production, including issues with material source, solubility, dosage, composition, and others. Solutions need to be developed to overcome these challenges and promote the industrial application of plant-based corrosion inhibitors.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article titled "Starch, cellulose and plant extracts as green inhibitors of metal corrosion: a review" provides an overview of the potential of starch, cellulose, and other plant extracts as green corrosion inhibitors. While the topic is interesting and relevant to the field of corrosion protection, there are several aspects of the article that need critical analysis.

One potential bias in the article is its focus on the advantages and potential applications of starch, cellulose, and plant extracts as corrosion inhibitors. The authors emphasize their low cost, low toxicity, and environmental friendliness compared to traditional corrosion inhibitors. However, there is limited discussion on the limitations or challenges associated with using these green inhibitors. This one-sided reporting may give readers an incomplete understanding of the topic.

Another issue is the lack of evidence or data to support some of the claims made in the article. For example, the authors state that starch, cellulose, and other plant extracts have shown excellent corrosion protection in laboratory settings. However, they do not provide specific examples or references to support this claim. Without supporting evidence, it is difficult to evaluate the validity of their statements.

Additionally, there is a lack of exploration of counterarguments or alternative viewpoints in the article. The authors present starch, cellulose, and plant extracts as promising alternatives to traditional corrosion inhibitors without discussing any potential drawbacks or criticisms. This omission limits the depth and balance of the analysis presented.

Furthermore, while the article mentions that there are factors affecting the industrial application of these green inhibitors (such as source, solubility, dosage, composition), it does not provide a comprehensive analysis or discussion on these deficiencies. Instead, it states that no such inhibitors have been successfully applied to anticorrosion industry without further explanation or exploration of potential solutions.

The promotional tone throughout the article is also worth noting. The authors repeatedly highlight the advantages and potential benefits of using starch, cellulose, and plant extracts as corrosion inhibitors, but do not adequately address the challenges or limitations associated with their use. This promotional content may create a biased perspective and overlook important considerations.

In terms of potential risks, the article briefly mentions that traditional corrosion inhibitors are toxic and harmful to the environment. However, it does not provide a thorough analysis of the potential risks or drawbacks of using starch, cellulose, and plant extracts as alternatives. This lack of balanced reporting may lead readers to overlook potential risks or unintended consequences.

Overall, while the article provides an overview of the potential of starch, cellulose, and plant extracts as green corrosion inhibitors, it has several shortcomings in terms of bias, unsupported claims, missing points of consideration, unexplored counterarguments, and promotional content. A more balanced and evidence-based analysis would enhance the credibility and usefulness of the article.

# Topics for further research:

* Limitations of starch
* cellulose
* and plant extracts as corrosion inhibitors
* Criticisms of using green inhibitors for metal corrosion protection
* Challenges associated with industrial application of green inhibitors
* Comparative analysis of traditional corrosion inhibitors and green inhibitors
* Potential risks and drawbacks of using starch
* cellulose
* and plant extracts as corrosion inhibitors
* Alternative viewpoints on the effectiveness of green inhibitors for metal corrosion protection

# Report location:

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