



Highly Effective, Broad Spectrum Anti-parasitic

WPI

Whole Leaf Artemisia Annua Treatment

TITLE

Compositions and Methods for Treating Parasitic Disease

INVENTORS

Pamela J. Weathers

PATENT STATUS

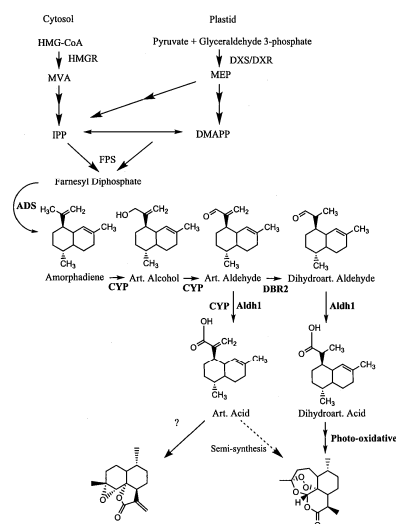
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SUMMARY

- High yield cultivars are grown and harvested per WHO guidelines. Leaves are stripped from the stems, dried, and pulverized. The stems can be discarded or further processed for livestock
- Batch processing and QC testing to determine the artemisinin concentration for a particular yield. Pulverized material is then encapsulated in the specified dose. Dried material should be stable for greater than a year
- The result is a low cost therapeutic for a broad spectrum of diseases, most especially parasitemia.

BACKGROUND

In low income and developing nations, malaria is the fifth most prevalent infectious disease and the tenth overall cause of death, and is projected to remain at that level until at least 2030. The World Health Organization (WHO) estimates that more than 380 million cases of malaria occur each year and account for more than 1 million deaths especially in developing countries. There is a need for low-cost, effective, and accessible treatment for parasitic infections in these regions.

Artemisia annua contains a number of compounds, including artemisinin, that have been used as an effective treatment for malaria. Artemisinin alone has been effective in treating malaria, but it is in short demand due to the high quantity needed for production and it is susceptible to drug resistance.

ADVANTAGES

- Broad spectrum treatment for a number of parasitic infections, such as malaria, chagas, leishmania, schistosomiasis, and toxoplasma gondii
- In addition, also can be used to treat neoplasms such as pancreatic cancer, breast cancer, lung and oral carcinoma, prostate cancer, and melanoma
- Delivery via whole plant incorporates other plant chemicals such as flavonoids
- Can be used to treat parasitic infections for livestock
- Plant is easily grown in temperate climates
- Easy processing: Leaves stripped off stems; discard stems or feed to livestock to control their parasites.