

Ibogaine Sources and Supply



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Sources of Ibogaine

- ◆ *Tabernanthe iboga* root bark, or root cell culture
- ◆ Semisynthesis from voacangine, from bark of several *Voacanga* tree species
- ◆ Present in trace amounts in other species, such as *Trachelospelmun jasminoides* (Star Jasmine)
- ◆ Synthesis from petrochemicals or natural products with simpler molecular structures, such as 5-HTP

Iboga Root Bark



Mix With Dilute Acid



Hydrochloric acid may give a better yield than vinegar

Stir Occasionally; Filter



Most Tedious: Squeezing Bark Pulp



Total Alkaloid (TA) Precipitation



TA Filtration



Spread TA For Drying



Dry TA With Warm Air



Powder and Sift TA



Extract TA With Acetone



Precipitate PTA HCl



Let Precipitation Finish



Filter and Dry PTA HCl



Advantages/Disadvantages of *Iboga*

Advantages:

- ◆ Convenient
- ◆ Short, Low-tech Processing
- ◆ Familiar, "Natural"

Disadvantages:

- ◆ *Iboga* going extinct:
 - ◆ Over-harvested from the wild
 - ◆ Slow growing
 - ◆ Small range
- ◆ Increasingly expensive
- ◆ Competing with Bwiti

Iboga vs. Voacanga

Iboga root bark
(~3% ibogaine)
↓ Extraction
Total Alkaloid (TA)
(~40% ibogaine)
↓ Precipitation
Purified TA HCl
(~80% ibogaine)

Voacanga bark
(~0.35% voacangine)
↓ Extraction
Total Alkaloid (TA)
(~3% voacangine)
↓ Purification
↓
(chromatography?)
Voacangine
↓ Hydrolysis

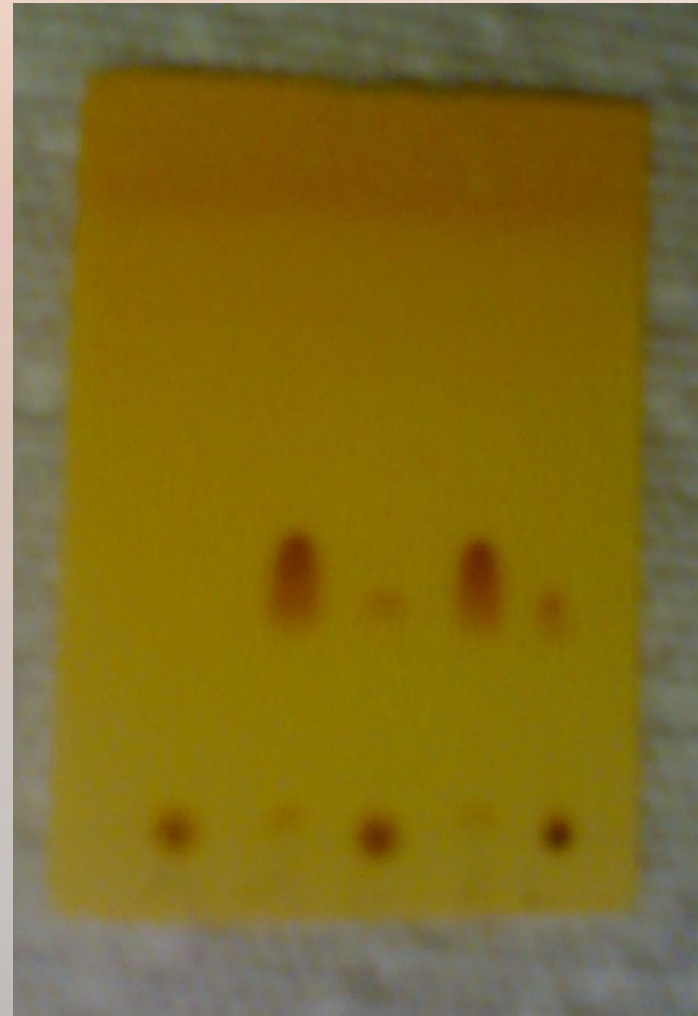
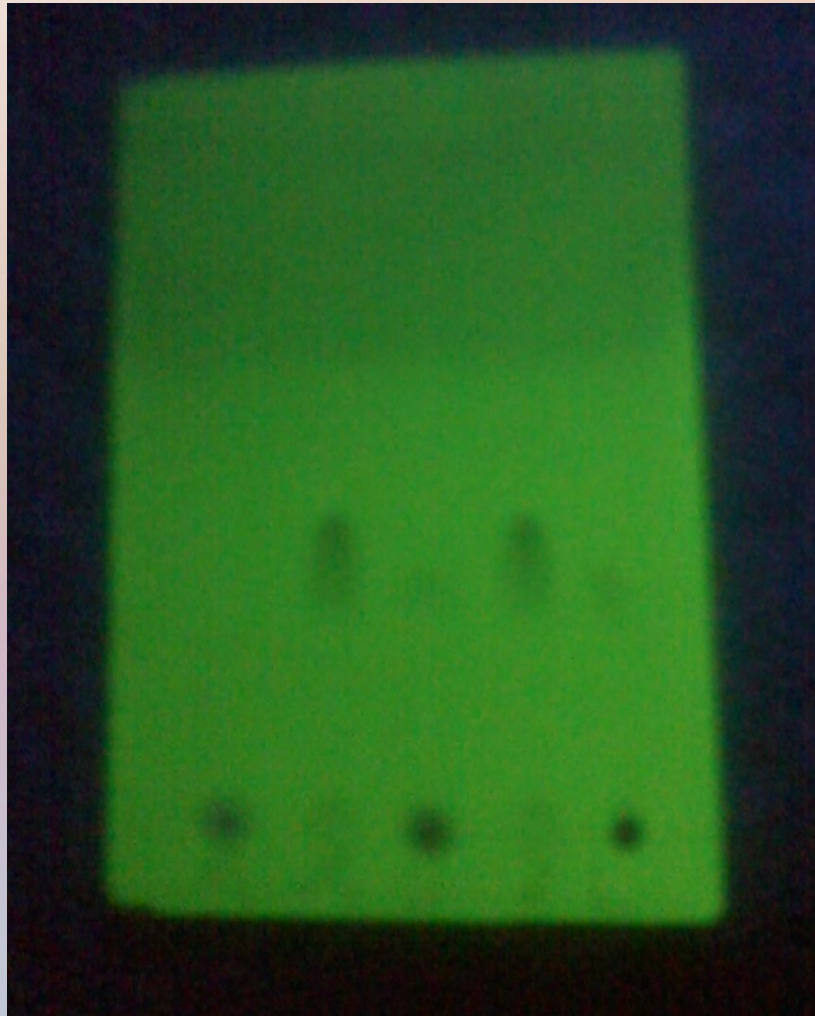
Reaction

Crude ibogaine

↓ Purification

Purified ibogaine HCl

Voacangine Chromatography



Advantages/Disadvantages of *Voacanga*

Advantages

- ◆ Sustainable, takes pressure off *iboga*
- ◆ Decreasing cost
- ◆ May make ibogaine affordable in poor countries

Disadvantages

- ◆ Less familiar than *iboga* derived ibogaine
- ◆ More complicated production requires central facility

Ibogaine Supply and Demand

Demand is increasing ~25% per year:

- ◆ More patients
- ◆ More clinics
- ◆ May skyrocket if prescription ibogaine treatment in New Zealand is funded

Supply is apparently increasing faster than demand:

- ◆ Price has dropped below \$200/gram
- ◆ Seems to be due to *iboga* extraction
- ◆ Little interest yet in *Voacanga* derived ibogaine, maybe due to unfamiliarity

Recommendations

- Help establish the production and marketing of *Voacanga* derived ibogaine to shift pressure from the *iboga* species while it can still recover.
- If you extract *iboga*, try extracting with 0.1 M HCl after the vinegar extractions are over, to see if additional TA and PTA HCl are obtained.

Thank You for Your Attention

