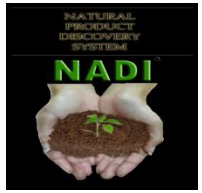
Pharmacoinformatic for Drug Discovery from Natural Product

Collaboration to Supporting of Development Indonesia Biodiversity

Biodiversity and Conservation

Tokyo and Yamagata University

Databases of Indonesia Natural Product for Drug Discovery



Universiti Sains Malaysia

Active drug or food functional

Do we need GRID COMPUTING?

What have we done?

- Screening for anti cancer from Indonesian Forest Plants (100 plants)→ 20% plants: active
- Screening for anti diabetic from Indonesian herbal plants → 10 % from 40 plants : active
- Screening anti malaria (10 family of plants)

Bioassay guide activity and in silico

Further Research

challenges and opportunities into the future

Biodiversity Indonesia's Herbal Medicine :
30.000 plants (11 % of the world), 1.845 characterized as JAMU
303 plants were known the bioactive compounds

No databases for plants medicine and bioactive compounds of Indonesia

Challenges

Indonesia Natural Products Databases for Drug Discovery

Bioassay guide activity

in Silico Target Identification

Need collaboration

Grid Computing

Opportunities

Screening for bioactivity/pharmacology

Database
Database must be usefull for Drug Discovery

New candidate drug