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THE POSSIBILITIES OF URBAN HERBAL PRODUCTION

HERBAL PRODUCTION

- ✘ Herbal supplement sales increased 3.3% in 2010 for sales of \$1.7 billion
- ✘ Material in most end user products originate in another country
- ✘ U.S. consumers believe 77% of material come from U.S.
- ✘ Only 12% actually originates in the U.S.

LOCALIZATION OF MATERIAL

- ✘ Fresh plant material
- ✘ Consistent quality
- ✘ Repopulation of wild species
- ✘ Local economic stimulation



GOALS

- Identify top herbal supplements currently used in the United States
- Create a model for Urban Herbal Production for the City of St. Louis
 - Identify local consumption for select species
 - Assess land space needed to cultivate select species
 - Provide enough material to supply local market demand
 - Identify areas within city limits for growing space

INFORMATION REVIEW

- ✘ Top herbal supplements obtained from Herbalgram 2010 Market Report
- ✘ Harvest information from American Herbal Products Association Tonnage Review
- ✘ Trade statistics from United Nations COMTRADE database
- ✘ Vacant land area information from St. Louis Land Reutilization Authority

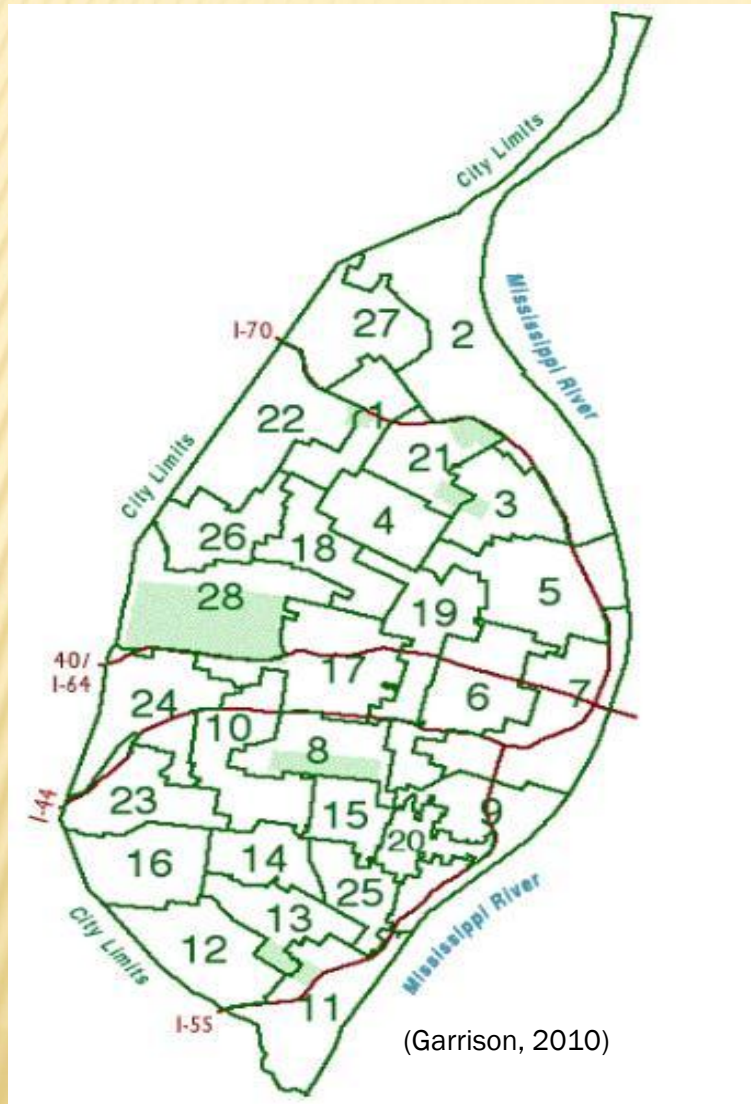


RESULTS

Table 1: Estimated Total U.S. Population Consumption of selected botanicals and projected land space needed to cultivate

Selected Botanical		Total consumed (lbs)	lbs/capita	STL Demand (lbs)	Expected lbs/Acre	Acres
Echinacea	<i>Echinacea purpurea</i>	553,639	2.4 x 10 ⁻³	594	2600	0.23
Black Cohosh	<i>Actea racemosa</i>	324,557	1.4 x 10 ⁻³	348	4000	0.09
Peppermint	<i>Mentha piperita</i>	1,160,000	5 x 10 ⁻³	1245	2000	0.62
Ginseng (Amer.)	<i>Panax quinquefolius</i>	64,765	2.8 x 10 ⁻⁴	70	2000	0.03
St. John's Wort	<i>Hypericum perforatum</i>	621,720	2.7 x 10 ⁻³	667	646	1.03
Chamomile	<i>Matricaria chamomilla</i>	86,412	3.7 x 10 ⁻⁴	93	400	0.23
Valerian Root	<i>Valeriana officinalis</i>	185,260	8 x 10 ⁻⁴	199	514	0.39
Milk Thistle	<i>Silybum marianum</i>	170,973	7.4 x 10 ⁻⁴	184	2000	0.09
Feverfew	<i>Tanacetum parthenium</i>	4,694	2 x 10 ⁻⁵	5	1619	0.003
Elderberry	<i>Sambucus canadensis</i>	134,235	5.8 x 10 ⁻⁴	144	3500	0.04
						2.75

RESULTS



- All vacant lots in ward 15
- More than half in ward 17

Table 2: Summary of Possible Vacant Land Space

Ward	# of Lots	Total Land (sq. ft.)
15	10	40,541
17	27	79763

CONCLUSION

- × Selected botanicals can be cultivated on about 3 acres of land
 - × 37 vacant city lots
- × Selected plants can be used to treat
 - × Colds and Flu
 - × Stomach Illness
 - × Migraine
 - × Depression and Anxiety
 - × Liver Problems
 - × Insomnia
 - × Menopausal Symptoms

Crop Success depends on agronomic skill, pest/disease, weather, and soil composition
Consumer demand could potentially increase cultivation area

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