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Urban Agriculture Research and Scholarship Trends

What is Urban Agriculture?

Urban agriculture (UA) is an agricultural practice that is done within urban communities or areas. The term UA is synonymous with urban horticulture, urban gardening, and peri-urban agriculture. The practice of UA has historically been present in many cities, dating back to at least as early as the ancient Greeks¹. However, in more recent times agriculture has been moved predominantly to rural areas. That being said, there is a movement where UA is once again becoming a more common practice. UA is a worldwide phenomenon that is not restricted to certain regions or cultures. In this poster, however, the scholarly research of urban agriculture is what is being addressed specifically, not just the practice of urban agriculture.

Research questions

- What disciplines are researching *Urban Agriculture*?
- What constitutes *Urban Agriculture* research?
- Does *Urban Agriculture* research differ dependent on where research is conducted?

Table 1. Databases used in this study and the number of results obtained from the search. This includes duplicates across databases and otherwise unedited results.

Database	Provider	Results
CABI	Web of Science	674
Theses & Dissertations	ProQuest	224
PubAg	National Agricultural Libraries	194
EconLit	Ebsco	68
Sociological Abstracts	ProQuest	67
Academic Search Premier	Ebsco	365
Scopus	Elsevier	798

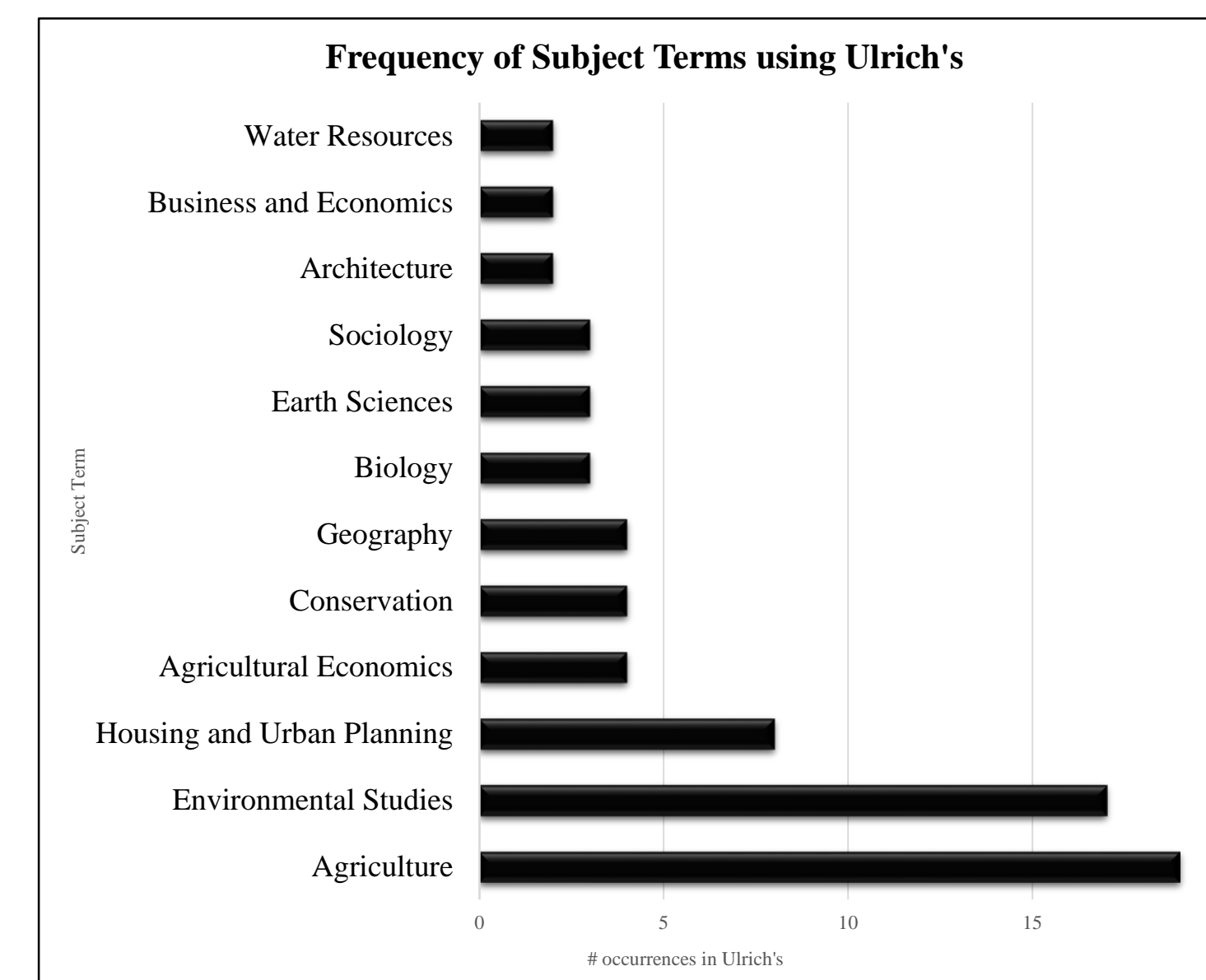


Figure 1. Subject listings in Ulrich's for journal titles with >5 articles on UA. This figure excludes terms with 1 occurrence.

- Additional terms that had only 1 occurrence:
- Technology & Environmental Safety
 - Social Sciences
 - Public Administration
 - Political Science
 - Philosophy
 - Medical Sciences
 - Hydrology
 - Gardening & Horticulture
 - Education
 - Dairying & Dairy Products
 - Crop Production & Soil

Table 2. The top 10 Journal titles on the topic of *Urban Agriculture* in this analysis

Journal Title	Number of articles
Acta Horticulturae	75
Journal of Agriculture, Food Systems and Community Development	32
Local Environment	28
Land Use Policy	28
Acta Agriculturae Shanghai	21
Landscape and Urban Planning	18
Cahiers Agricultures	14
Cultivos Tropicales	15
Agriculture and Human Values	17
Habitat International	14

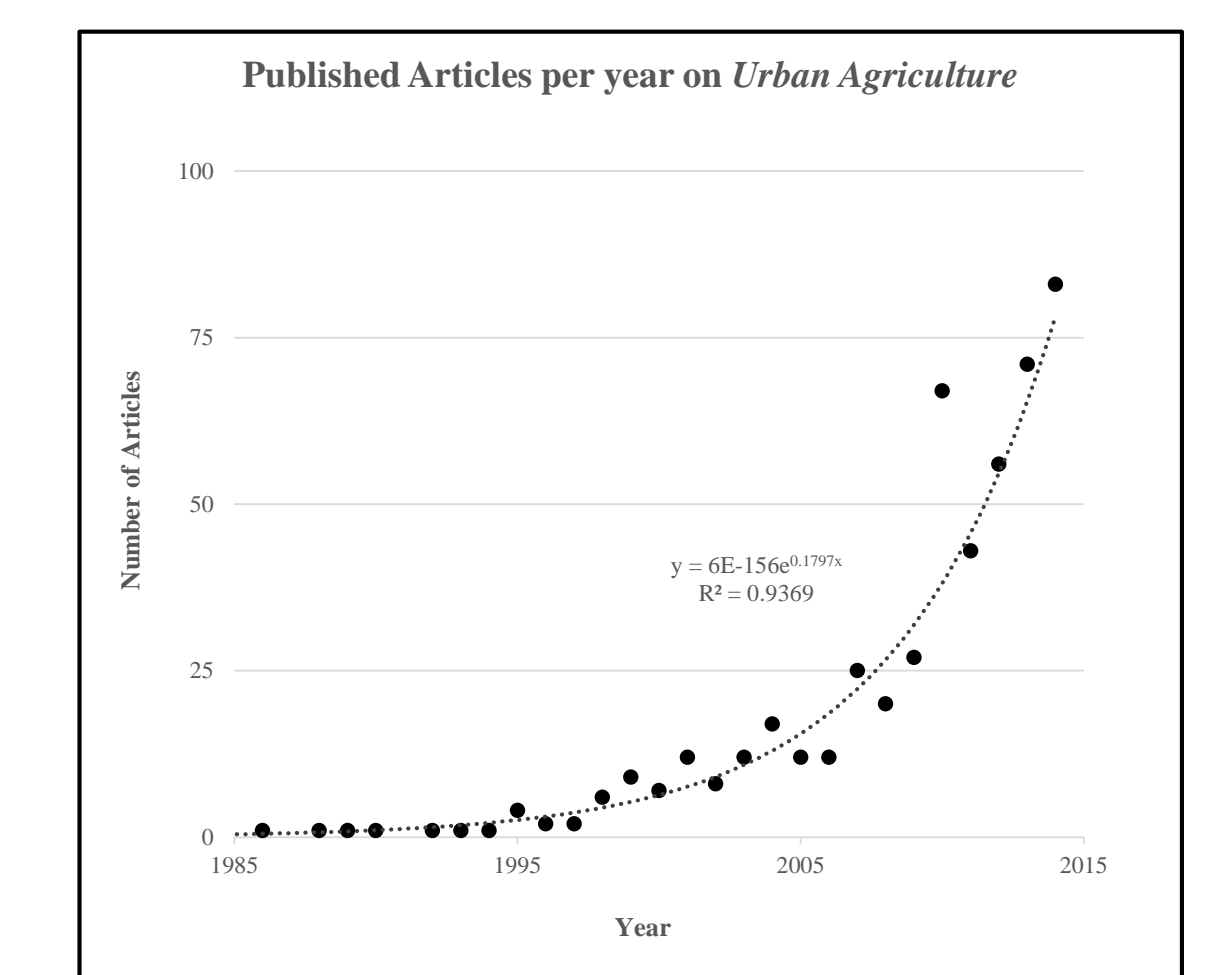
To reduce the total number of articles/journals to be examined, I removed those from journals that had less than 5 articles on UA within them. This resulted in a listing of 44 Journal titles. There were a total of 840 unique journal titles before removing lower output titles according to the above filter(s). The data shows a long tail of journal titles that have a single publication on UA. However, *Acta Horticulturae* had 75 articles found, and the next highest article count by journal title was published by the *Journal of Agriculture, Food Systems and Community Development*, with 32 journal articles (Table 2).

Table 3. Frequency of keywords (greater than 6 occurrences only) in this analysis. *Urban agriculture* and synonyms were removed.

Keyword	Frequency
food security	37
sustainability	31
urbanization	30
community gardens	21
urban planning	19
food system	18
land use	17
Business	16
Economics	16
vegetable	16
farming systems	15
urban	14
farmers	12
food	12
livelihood	12
Periurban	12
urban soil	12
agricultural development	11
biodiversity	11
developing country	11
food justice	10
land use planning	9
poverty	9
urban areas	9
wastewater	9
food production	8
gender	8
GIS	8
Plant Sciences	8
civic agriculture	7
community supported agriculture	7
Cuba	7
food desert	7
home garden	7
horticulture	7
irrigation	7
Kenya	7
planning	7
Public Administration	7
Tanzania	7
urban development	7

Table 4. Top 20 Countries where UA research was conducted.

Country	No. of Articles
United States	86
China	75
Cuba	29
Canada	25
South Africa	19
Ghana	16
United Kingdom	15
Nigeria	15
Italy	14
Kenya	14
Mexico	14
Burkina Faso	13
France	13
Tanzania	10
Benin	9
Cameroon	9
Senegal	9
Uganda	9
Australia	8
Japan	7



UA has a growth rate of ~18% over the period 1980-2015. Scientific output, in general, has been shown to be growing at 2.9% from the period 1980 – 2012².

Methods (brief)

1. Seven databases were searched for peer-reviewed literature (table 1)
2. Searched databases for *Urban Agriculture* and its synonyms
3. Citation information was recorded for each article
4. Keywords from each article were analyzed
5. Physical location of the research sites were noted

Table 5. Frequency of keywords when organized by the disposable income of a country's citizens as determined by the GDP-PPP, or the *Gross Domestic Product – Purchasing Power Parity*. Category 1 countries are of lower wealth than category 5 countries. See *handout* for a list of the countries in each category.

GDP-PPP Category 1		GDP-PPP Category 2		GDP-PPP Category 3		GDP-PPP Category 4		GDP-PPP Category 5	
Keyword	Frequency	Keyword	Frequency	Keyword	Frequency	Keyword	Frequency	Keyword	Frequency
food security	10	business	16	biodiversity	8	community gardens	11	community gardens	15
urbanization	9	economics	16	farmers	5	sustainability	11	food system	11
farming systems	7	agricultural development	10	heavy metals	4	farming systems	5	food justice	9
irrigation	6	plant sciences	8	urban soil	4	land use	5	food desert	7
urban planning	6	urbanization	8	farming systems	3	economy and rural development	4	food security	6
wastewater	6	public administration	7	food security	3	local food	4	urban planning	6
nutrition	5	developing country	5	participation	3	planning	4	alternative food networks	4
sustainability	5	livelihood	5	plant breeding	3	urban soil	4	community food security	4
developing country	4	vegetable	5	sustainability	3	agricultural land	3	community supported agriculture	4
farmers	4	food security	4	varieties	3	allotments	3	home garden	4

References

1. Imbert, D. (Ed) (2012). *Food and the city: histories of culture and cultivation*. Dumbarton Oaks: Washington, D.C.
2. Bormann, L. and Mutz, R. (2015). Growth rates of modern science: a bibliometric analysis based on the number of publication and cited references. *Journal of the Association for Information Science and Technology*, 66(11): 2215-2222.