

**Pilot study to determine if *Lannea edulis*
(Sond.)Engl., *Clematopsis scabiosifolia*
(DC.)Hutch or *Pachycarpus schinzianus*
(Schltr.)N.E.Br. have commercial potential in
the Gauteng horticultural market.**

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Purpose of the study

- ▶ The purpose of this study was to interview members of the public to see which plant they found the most attractive. The reason for this was to explore the possibility to propagate the most popular plant and sell it in a nursery

Research questions

- ▶ Which from a selected of three plants namely *Lanea edulis*, *Clematopsis scabiosifolia* and *Pachycarpus schinzianus* would have had the most aesthetic appeal to the public?

MOTIVATION OF THE STUDY OR RATIONALE

- ▶ The motivation and rationale of this study was to ultimately determine the best propagation method to grow the selected plant species indicated in the pilot study for the commercial sector within the Ornamental horticultural industry.

AIM AND OBJECTIVES

- ▶ The aims and objectives of this study were for the public visiting selected garden centres in Gauteng to identify one of the three plants selected from Telperion nature reserve, which would lead to propagation experiments to encourage the availability of the selected plant into the commercial sector.

METHODOLOGY

- ▶ Questionnaires were designed and moderated
- ▶ The public were interviewed at different garden centres, SANA trade day and sent out electronically to various stakeholders
- ▶ The interviews were carried out in spring when the public were motivated to get back into the garden after winter.
- ▶ Individual banners were made with large colour prints of each plant in question.
- ▶ This was presented as an exhibition to attract interest from the public rather than just walking around trying to engage with the public.
- ▶ As this was a pilot study, 55 questionnaires were sufficient for come the conclusions for phase two of the project, the literature review.

Lananea edulis



Clematopsis scabiosifolia

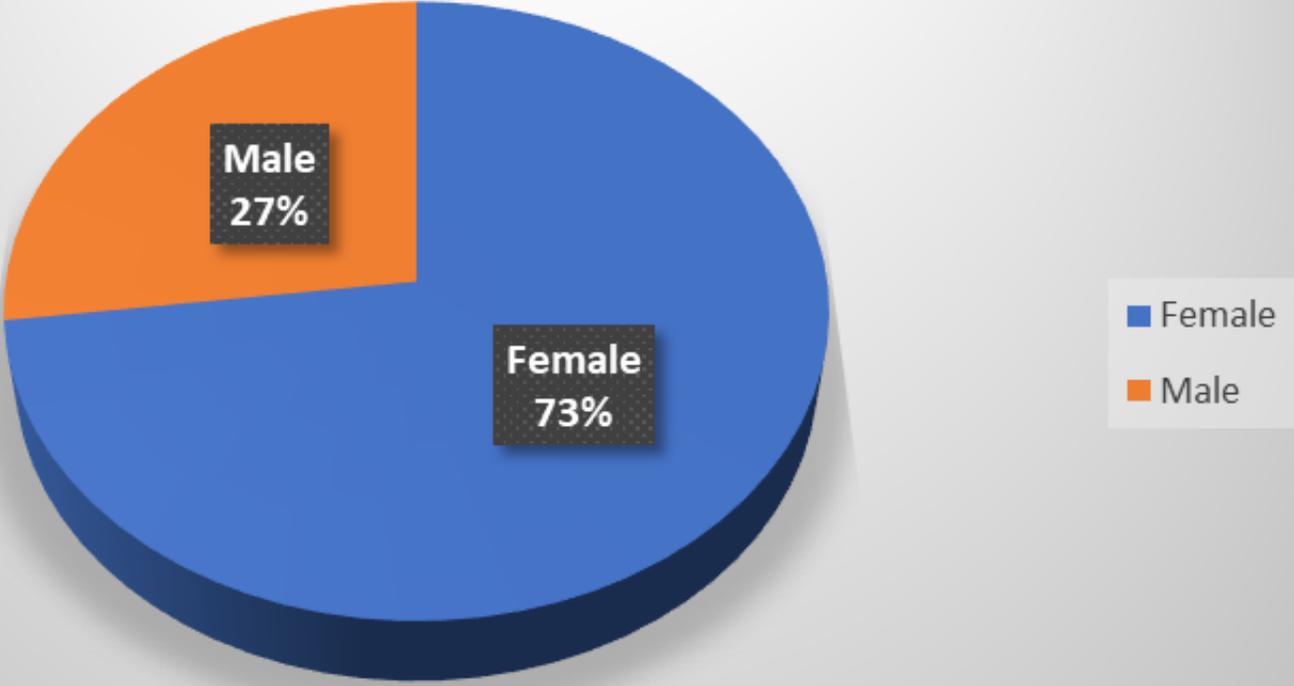


Pachycarpus schinzianus

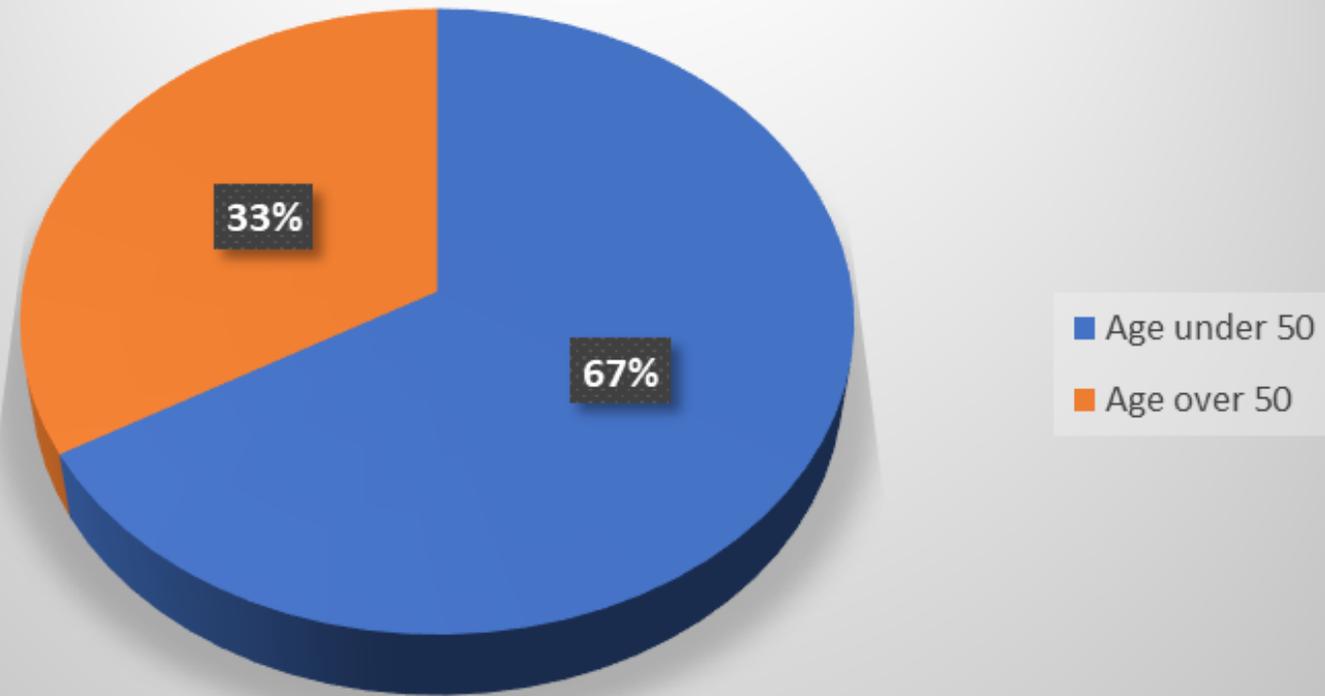


Results

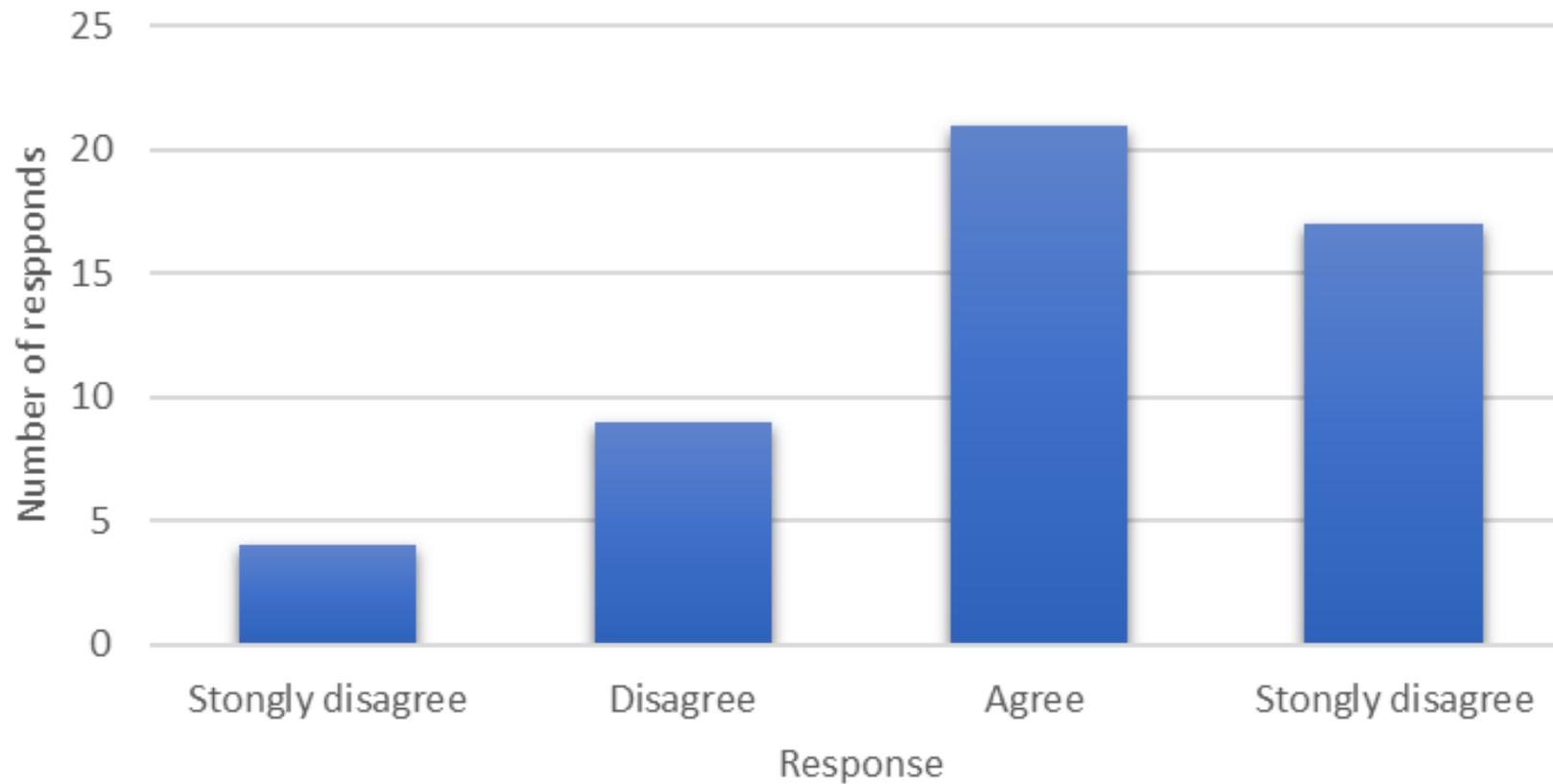
Respodents gender distribution



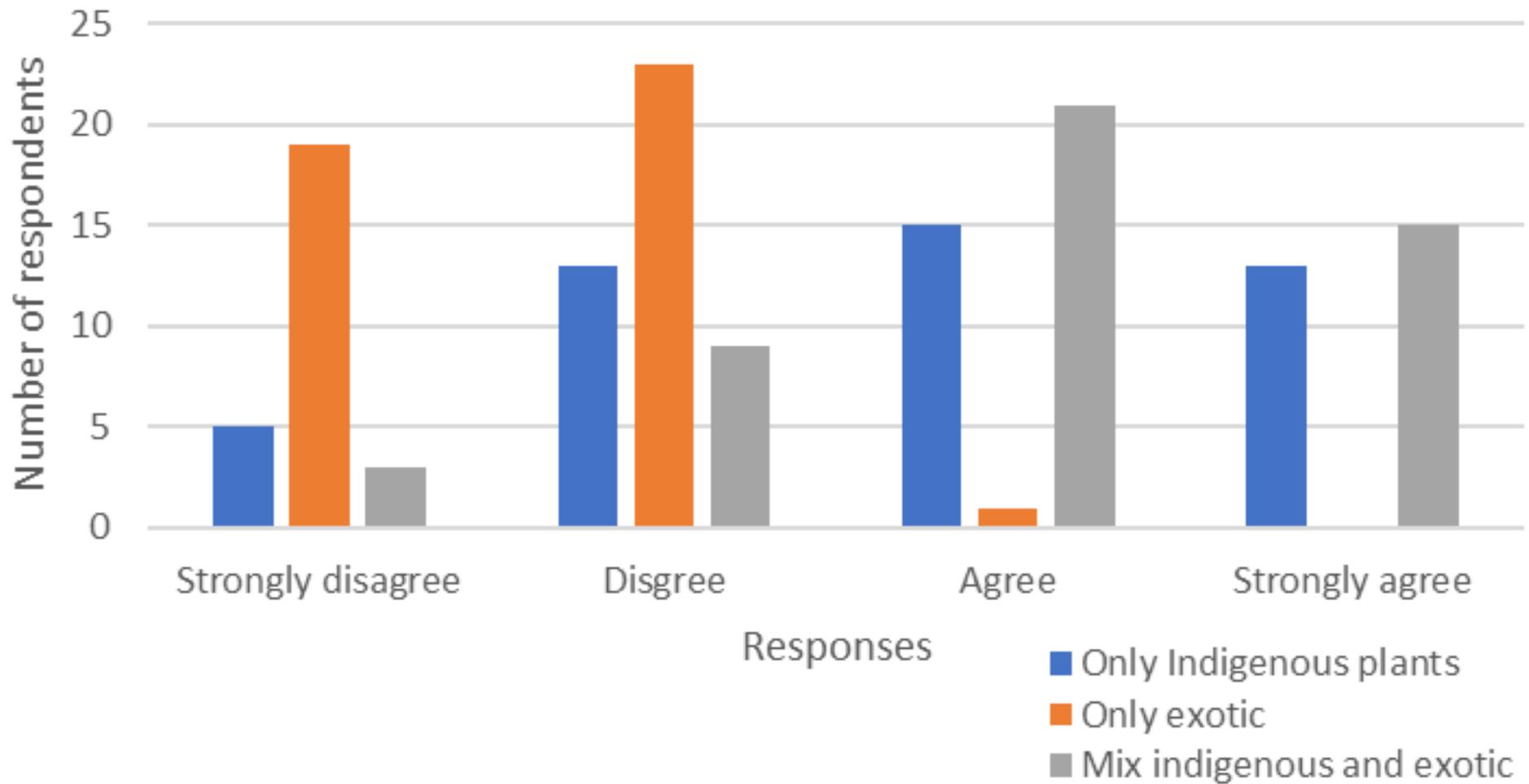
Age distribution



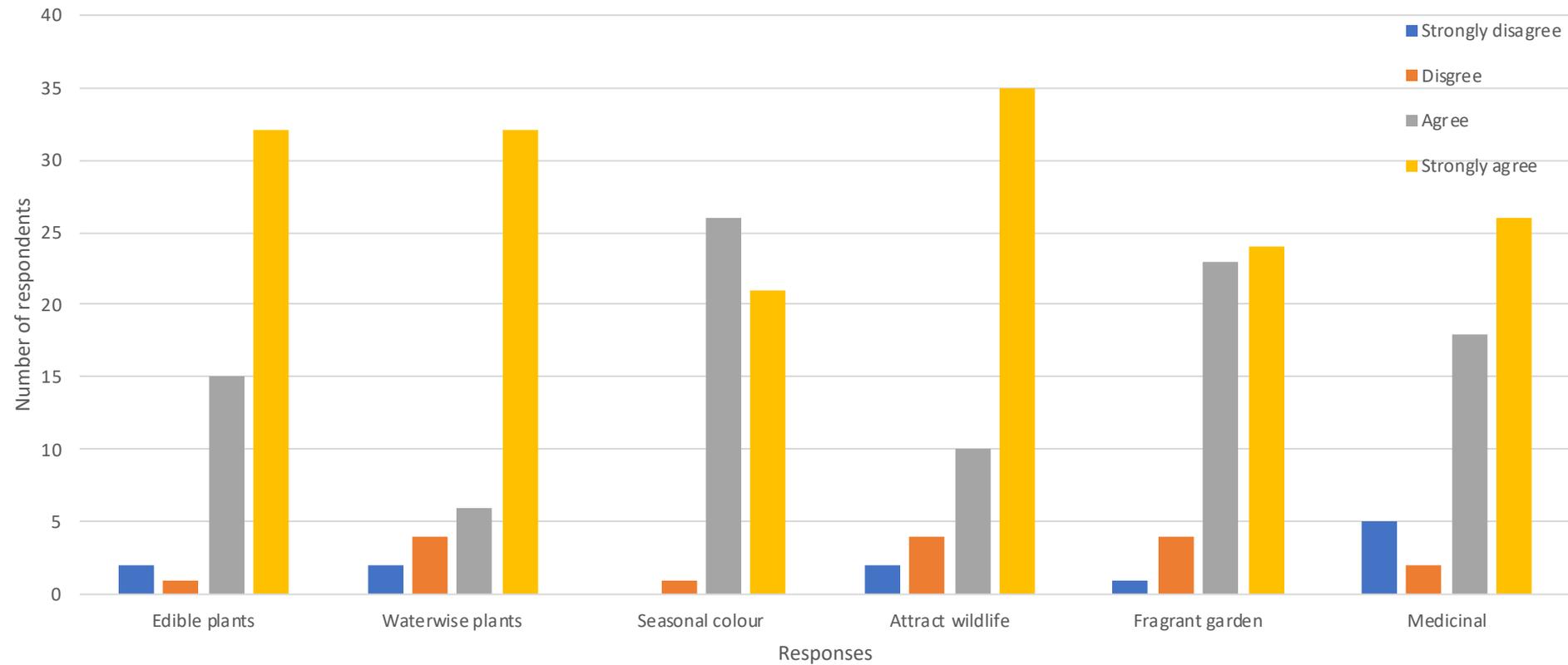
Are you a gardening enthusiast?



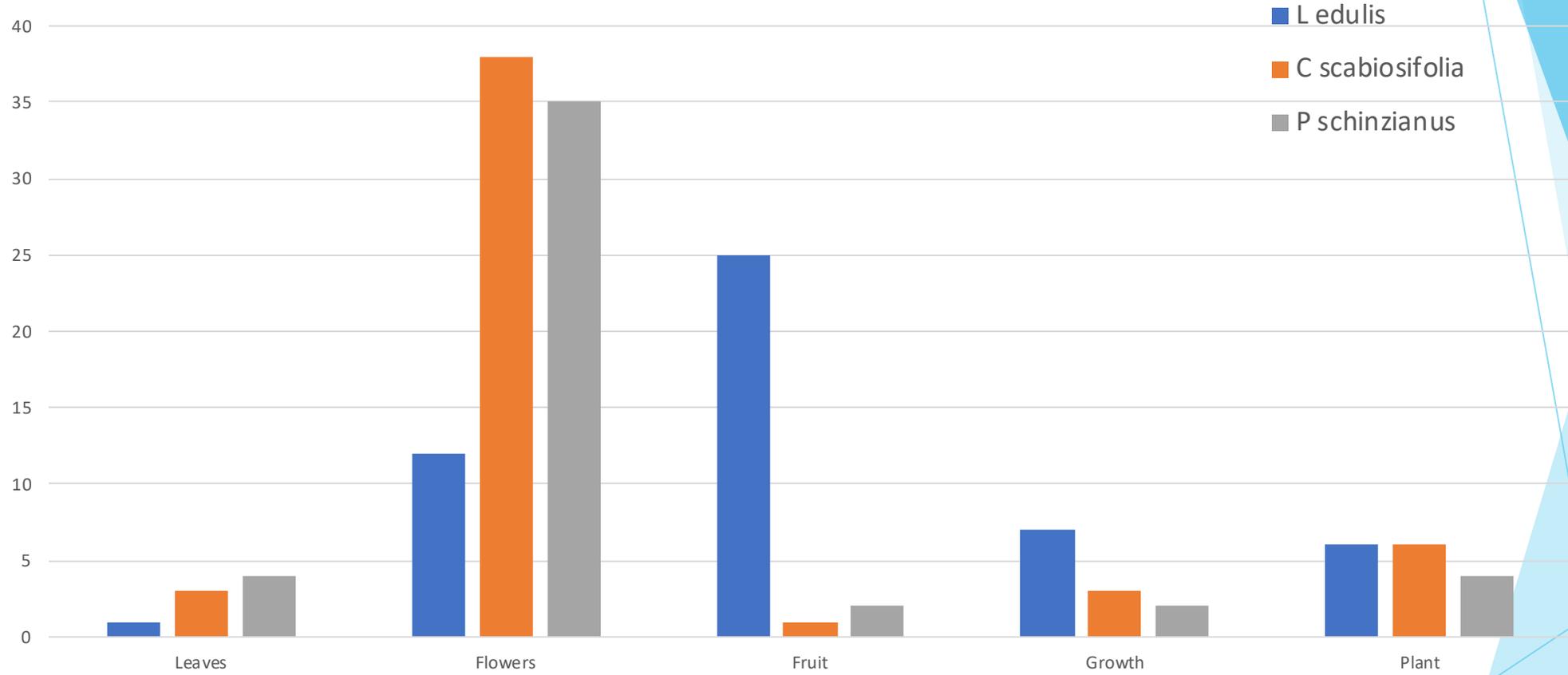
Indigenous V.S Exotic



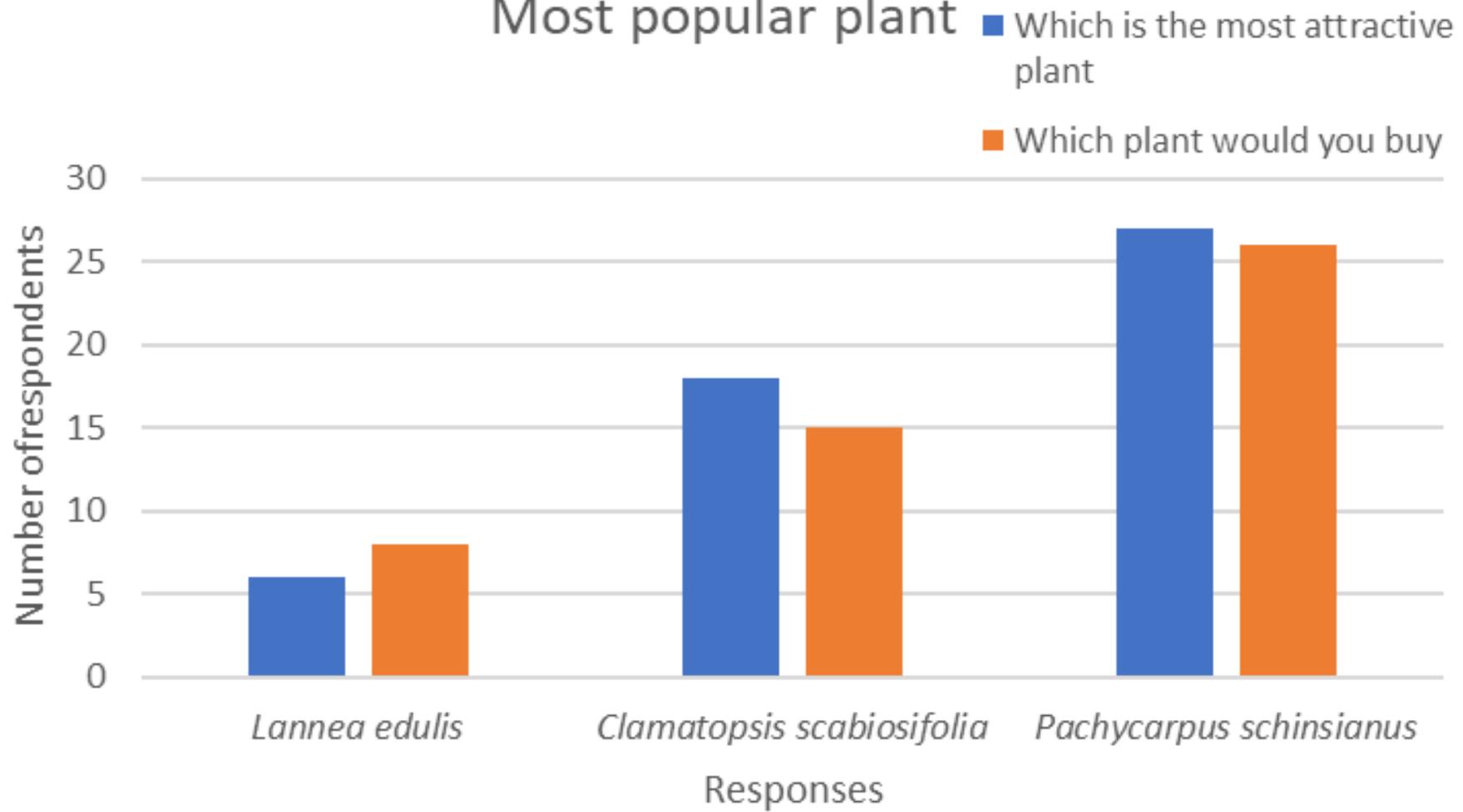
What is important in your garden?



Most popular features of the selected plants



Most popular plant



Pachycarpus schinzianus

- ▶ Family: Apocynaceae
- ▶ Common names: cream cups (Eng.); bitterwortel (Afr.)
- ▶ A rough-textured, erect perennial herb,
- ▶ 0.3 to 0.6 m tall
- ▶ Resprouts from an underground rootstock.
- ▶ Leaves simple, large, lanceolate and leathery, with rough hairs.
- ▶ Wavy margins with a red or maroon edge.



Flowers large, cup-shaped , with recurved upper tips

Carried in clusters on the tips of the branches

The flowers are cream-coloured to yellowish to pink

Corona always has a maroon blotch on the inside



- ▶ The plants contain thick milky latex which is secreted wherever a plant is damaged
- ▶ Flowers from September to February
- ▶ The fruit are spindle-shaped, 50-70 mm long, contains 5-7 lateral wings and is hairless.
- ▶ The fruit contains many brown seeds.



- ▶ The seeds contain a tuft of hairs called a coma which forms a parachute-like structure at the tip of the seed.
- ▶ This is very important for wind-dispersal which is exhibited by these plants.



Conservation Status

- ▶ *Pachycarpus schinzianus* is currently not protected or threatened.
- ▶ Occurs mostly in the Gauteng Province
- ▶ Widely harvested for medicinal purposes
- ▶ Endemic species, widespread in the grasslands of South Africa.

Medicinal Uses

- ▶ Remedy against syphilis and to aid conception
- ▶ Dutch remedy for haemorrhoids
- ▶ Concoctions of the roots used to treat dropsy, dysentery and even snakebites
- ▶ Milky latex is rubbed on animal skins before set out to dry to prevent dogs from tearing them
- ▶ Crushed leaves are rubbed on the legs to repel dogs
- ▶ Used as a tonic for the cardiovascular system

Uses continued

- ▶ Used in decoctions and infusions as an emetic, diuretic and purgative
- ▶ Zulu people use the roots for indigestion, malaria and other fevers (including typhoid fever).
- ▶ Xhosas use infusions of the root for colic and abdominal troubles and sniff the dried pounded roots to relieve headaches.
- ▶ Poisonous to sheep and guinea-pigs,

Growing *Pachycarpus schinzianus*

- ▶ Difficult to cultivate these plants due to its deep rootstock
- ▶ The fruit and stems are not very attractive and the stems die back after fruiting in the colder months
- ▶ Prone to infestation by various insects

Thank you