FOODS AND FEEDING HABITS

OF

THE PEDI

WITH

Special Reference to Identification, Classification, Preparation and Nutritive Value of the Respective Foods

BY

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CHAPTER II

ETHNOLOGICAL AND HISTORICAL BACKGROUND OF THE PEDI

Van Warmelo (1935, p. 59) groups the Bantu tribes of South Africa as follows:

Nguni
Tonga
Sotho
Venda
Lehla and others

The Pedi is one of the Sotho tribes, but which of these tribes first came to South Africa and where they settled, has probably not yet been determined. Van Warmelo (1935, p. 96) states: "The tradition of an origin in, and immigration from the North is much more alive amongst the Western tribes than amongst those of the East. The route the former took must have led them through the Western Transvaal or Bechuana Land, skirting the desert. The tribes in advance of that immigration mixed their blood with that of the Bushmen and Hottentots. Those further east had no opportunity, and their appearance, when compared with that of the Bechuana, confirms our surmise as to the difference in their ancestry."

According to van Warmelo (1935, p. 96) the tribes belonging to the Sotho division are domiciled essentially on the higher plateau of the interior, but large parts of this area—e.g. the high veld—were never really favoured by them. Furthermore, the Sotho tribes, despite the wars of a hundred years ago, did not seek new homes as far afield as some of the Nguni tribes.

With reference to the general characteristics of the Sotho, van Warmelo (1935, p. 96) is quoted as follows: "The tribes of the Sotho division form a well-defined group. One of its most arresting characteristics is the unusual form of Bantu speech which is common, though in many different dialectical variants, to all its members. The term Sotho is therefore also used in Bantu philology as a purely linguistic designation. But it is no less appropriate as a collective term for a large and important ethnographical group. Of the ethnological features of this group one might mention totemism, the possession of cattle, with a cattle complex and extensive cattle terminology, a type of round hut with conical roof, and the pre-emptive right of men to marry their maternal cousins."

The different tribes constituting the Sotho division, van Warmelo (1935, p. 97) groups as follows:

South Sotho
Western Tswana
Eastern Tswana
Central Sotho
Eastern Sotho
North-Eastern Sotho
Northern Sotho

The Pedi tribes belong to the Central Sotho group and are referred to by van Warmelo (1935, p. 108) as follows: "The tribes comprised in this group were at one time largely under the rule of the Ba Marotheng, the Ba Pedi proper whose last independent king was Sekhukhune. The Marotheng who are said to have been Ba Xatla in origin imposed their rule upon a variety of tribes of different origin, such as the Ba Xatla and Ba Koni who had come from the East, other Ba Koni from Mafamat's in Pietersburg, by Kwenza possibly from the West, Ba Roka from the East, and others. Under the prolonged rule of the Marotheng there was the inevitable trend towards unification and so in course of time there evolved what one might call the Pedi nation or people. Though far from having achieved real cultural unity, these people yet form something which was not there before and which is in a sense a whole. The language spoken in Sekhukhunland has been adopted as a standard of written Sotho for the whole Eastern Transvaal."

The history of the Pedi under their successive rulers is briefly as follows:

Tabane
The earliest known chief of the Pedi, when they still were a Bakgatla clan living at Mapogo or Mahlakoeng near the source of the Vaal River, was Tabane also known as Motsotlhabane (Winter 1912, p. 88). It was during his rule that the clan migrated to settle at a place known to-day as Sekhukhuneland in the Pretoria District. For how long they remained there is not known (Hunt 1931, p. 275).

Liale
Liale succeeded his father Tabane. According to Ellenberger (1912, p. 348) he was also known as Mopeli and since he proved himself a successful warrior in subjugating all the small clans around him, his following increased and assumed his name for the tribe, calling themselves Bapeli (Ellenberger 1912, p. 32).
Hunt (1931, p. 276) suggests that the tribal name Bapedi originates either from that of the country in which they settled eventually, and which was known as Bopedi, or that they assumed the name Bapedi from a Bavenda iron-making clan, the Vhambeizi, the phonetic equivalent of Bapedi.

MOTSHA

The reign of Motsha, the son of Liale and grandson of Tabane actually marks the birth of the Pedi tribe. Tradition has it that the unborn child of Ma-Thobele, one of Motsha’s favourite wives, made noises while still in its mother’s womb. This caused great consternation amongst the women, who with their mocking songs stirred up quarrels. The child was born and appropriately named Le-lella-teng (you cry inside), but this strange phenomenon preceding the birth of the child was attributed to witchcraft, and to save mother and child from a ritual murder Thobele, the successor of Motsha, and a section of the tribe including Ma-Thobele and her son fled towards the East. The child Le-lella-teng was afterwards renamed Moimane (Hunt 1931, p. 275).

(It is interesting to note that in 1951 a press report gave head-line publicity to the unborn baby of Mr. and Mrs. Frank Aviloz of California, who is reputed to have “kept crying on and off for three nights running.” —Sunday Express, Johannesburg, September 9, 1951.)

THOBELE (Circa 1650)

Tradition as related by Ralolo (Winter 1912, p. 89) has it that Thobele was the chief under whom the Bakgatla clan left Schlipfontein. He was still a young man and trekked forth to the east with a large following and many cattle, sheep and goats.

According to Hunt (1931, p. 275) Thobele was still alive, but very old, when the section trekked to the east with all their flocks and herds (see plate 4).

They crossed the Olifants River (Lepalu) at Molalegi, a point below the confluence with the Elands River and passed through the country which is now North-Middelburg. This area was occupied at that time by some scattered Matlala and Batau (Hunt 1931, p. 275, Winter 1912, p. 88, Ellenberger 1912, p. 32). At this stage they still identified themselves as Bakhatla with kgabu (monkey) as their totem animal.

On crossing the Lulu mountains, at what is now known as Maiwa Pass (Ralolo refers to this pass as Mo’laki—Genokakop—Winter 1912, p. 89) they came across a porcupine (Noko) and promptly adopted it as their new totem. This period also marks the introduction of songs of praise to their chiefs, a custom not practised amongst the Bakhatla.

The country east of the Lulu mountains and along the lower Steelpoort river was occupied at that time by a section of the Baroka known as Montagatane under a chief, Mashabale; and further to the south numerous small sections of the Bakoni were to be found.

Thobele’s regime was marked by general prosperity and peace, his people paying tribute to the chief of the Mongatane with nominal amounts of thatching grass and poles (Hunt 1931, p. 277).

The praises of this great chief have survived the passage of time and even to-day the Pedi greet another with Thobele! It was probably during his regime, or maybe shortly before, that the Mapalatka raided this part of the country. These raiders are said to have been armed with muskets and to have worn long white dresses, which tends to identify them as Arab slave raiders. The Baroka killed off one party of thirty at Pashaskaal (No. 126), while another party was wiped out by the Batau at Magashoa in Geluk’s Location (Hunt 1931, p. 277).

KABU

Thobele was succeeded by his son Kabu who had two sons Thobele and Thobejane. Thobele, who was to have been his father’s successor, was driven from the tribe on account of having had intercourse with one of his father’s wives while still an uncircumcized youth. Accompanied by his immediate adherents, a number of girls, and many cattle, he fled to the north and no further reference is made to him in Pedi history (Hunt 1931, p. 277).

THOBEJANE

Since Thobele was ostracized, his brother Thobejane succeeded their father Kabu.

Hunt (1931, p. 278) refers to Thobejane’s reign as peaceful and prosperous, so much so that his name is still revered as one of the tribe’s best chiefs, and to this day a member of the chief’s house may be honoured with the greeting Thobejane!

MOUKANGOE

On Thobejane’s death his son Moukangoe became chief. His regime was marked by great prosperity and peace. Tsetse fly was then unknown and the herds of cattle prospered in the splendid grazing country along the Steelpoort river. It was during his regime that the still prevailing custom of presenting the three right-side ribs nearest the shoulder of any ox killed, to the chief’s kraal, was introduced. This cut is known as Lehlakore le moša (the portion for the chief’s kraal).

He attained a great age and his forehead became so full of wrinkles that they had to be supported by bandages to enable him to see (Hunt 1931, p. 278).

MOHUBE

Old Moukangoe outlived his eldest son and heir Lesailane and was consequently succeeded by his second son Mohube. Mohube apparently diverged from the peaceful attitude of his predecessors and quarrelled with his neighbours the Bagakomane who, in a hunting dispute, killed him and some of his followers. The Pedi promptly retaliated and killed some of the Bagakomane (Hunt 1931, p. 278).
MAMPURU I

Since Moroamoche, the son of Mohube, was still a child at the time of his father's death Mampuru, the third son of old Moukangoe, then in his dotage, was appointed chief. Mampuru's regime marks the rise of the Pedi as a paramount tribe. It was during his reign that, as Hunt (1931, p. 279) states, "The Bapedi were able to throw off, though still slightly acknowledging, the former supremacy of the Bamongatane, and to begin to assert that authority over their neighbours which exists up to this day throughout what is known as Sekukuniland. Mampuru, who was only acting chief and guardian of the real heir, the youngest Moroamoche, brought him up together with his own son Nthobeng, and these young men eventually became Mampuru's leaders in all his subsequent and numerous forays."

In dividing the spoils of a successful raid on the Bakoni, in which Moroamoche overshadowed his colleague Nthobeng, Mampuru succumbed to parental prejudice by giving his son the lion's share of the spoils. This unfair action of Mampuru provoked the wrath of Moukangoe, who promptly collected a beast from each owner and handed them all to Moroamoche, but none to Nthobeng. It was thus formally accepted by the tribe that Moroamoche was to succeed as chief.

When old Moukangoe died, Mampuru seized the opportunity of burying him and thus, according to Pedi tradition, automatically instituted himself as chief. This left Moroamoche, the rightful heir, no alternative but to fight for the chieftainship. In the desultory fighting that followed Mampuru was defeated and wounded, but instead of killing him, Moroamoche allowed him to go free and live first at Suule (Maandagshoek) and later at Malokelo (Putney) (Hunt 1931, pp. 278-280).

MOROAMOCHE

It appears that Moroamoche's regime passed peacefully. He was buried at a place marked to-day by the farm Goudmy and Steelpoort station (Hunt 1931, p. 280). Hunt (1931, p. 280) states that with the death of Moroamoche ends what may be called the earlier traditional history of the Bapedi, which from now onwards can be tied in with the recorded history of South Africa.

THULARE (Period 1780(?)—1824)

Moroamoche had three sons, viz. Dikotope, Thulare and Motodi. Dikotope succeeded to his father's throne but old Mampuru who, at that time, was living in a cave in the mountains near the Olifants River, incited Thulare to fight his brother for the chieftainship. Dikotope was defeated and killed and the wily old Mampuru tendered his allegiance to Thulare, enthroning him on his own throne made of buffalo and koodoo horns, and furthermore requested Thulare to bury him alongside Moroamoche when he died. This, however, was the prerogative of Molamoso, Mampuru's son who acted accordingly, but Thulare with some of his followers exhunted the body and reburied it at the old head kraal of the tribe on the lower Steelpoort. Thulare thus became the undisputed chief and according to Hunt (1931, p. 283) the greatest and most renowned of all Pedi chiefs. His regime was marked by numerous raids and wars. He subjugated Molamoso and his followers, raided and defeated the Amandebele at Moletlane and shortly afterwards made his greatest expedition into the Waterberg and Zoutpansberg Districts and then back over the Drakensberg, reducing the whole country to his rule. So many cattle did he accumulate that they were said to have covered the country from the Lulu mountains to the Komati river. He sent his favourite son Makgeru on a secret mission to Delagoa Bay, who brought back with him two white men on horseback. The visit of these men was treated with the greatest secrecy and the hoofmarks of the horses, which were apparently strange animals to these people, caused no end of speculation. Thulare ruled for a long time and was known as a just and merciful chief. His regime was marked by the numerous hymns of praise in his honour (Winter 1912, pp. 378-379).

His death in 1824, as determined by the date of a solar eclipse, fixes the first definite date in the history of the Pedi (Hunt 1931, pp. 282-284; Winter pp. 93-96). Thulare was survived by his chief sons Malekutu, Matsese, Phethedi, Motodi, Sekwati, Makopoloe, Makgeru and Sibasa.

MALEKUTU (Period 1824—1826)

As rightful heir Malekutu succeeded to the throne. He was an active fighter and raided far and wide, even as far as the Vaal river, but during his absence on these raiding expeditions his brother Matsese started usurping his authority and eventually poisoned him (Hunt 1931, p. 285).

PHETHEDI (Period 1826—?)

By killing Malekutu, Matsese however did not gain his object of becoming chief. He was driven out and subsequently killed by his younger brother Phethedi, the third son of Thulare, who then became chief. It was during the reign of Phethedi when, about 1826, the dreaded Matabele first invaded the country and killed Phethedi and all his brothers excepting Sekwati (Hunt 1931, p. 285; Winter 1912, p. 98).

SEKWATI (Period ?—1861)

Moselekatse and his Matabele hordes completely demuded the country of all stock and grain, and slaughtered the Pedi wholesale. Sekwati the only survival of the house of Thulare who had now become chief, escaped with a goodly portion of the tribe and fled north into the Zoutpansberg.

Remnants of the tribe however stayed behind hiding in the hills around Ohrigstad, and to avoid starvation resorted to cannibalism. Sekwati and his
Followers wandered as far north as Blauwberg, making raids on smaller tribes, but always avoiding the Matebele. Eventually, after four years of wandering, he decided to return to the land of his birth, where in the meantime a Mokoni leader, Marangang, a commoner, had begun to assert himself. Sekwati succeeded in defeating and killing him, and also defeated the Bakoni under Kabu as well as the Bamagaka under Legadimane. He distributed cattle to stop cannibalism, killed the two cannibal chiefs Marubanye and Makulele and re-established the old Pedi in Sekukuniland. He followed Moshesh's diplomacy in sending the invader presents of ostrich feathers and sibhipa (wild cat) skins, an act which fostered peace until as late as 1906.

In 1845 Hendrik Potgieter and his Voortrekkers appeared in Sekwati's country. Their reception was friendly and they were allowed to found Ohrigstad where they settled.

Friendly relations, however, came to an end when Potgieter, together with the Buys clan and some Barolong, attacked the Pedi in the winter of 1846. The Pedi lost 8,000 cattle, 6,000 goats and a large supply of calico obtained from the Portuguese (Hunt 1931, p. 289).

Strained relations continued and in August/September 1852, Potgieter again attacked the Pedi.

In 1853 Sekwati sued for peace, and the bearers with his peace offerings arrived at Potgieter's headquarters on the day of his funeral. Bad friendship, however, continued until November 17, 1857, when an agreement was entered upon between "The Volkraad of the Lydenburg Republic" and "The Matlaete Kaffir Chief Sekwati". The gist of this agreement was that the Steelpoort river was henceforth to be the boundary between the Voortrekkers and the Pedi. Hunt (1931, p. 291) states that it is worthy of note that the majority of the Pedi regard the Steelpoort as their eastern tribal boundary even to this day, despite the many events that have taken place since.

Peace was thus restored to the country and Sekwati died on September 20, 1861 (Hunt 1931, p. 291).

Sekukuni I (Period 1861—1882)

The Matebele invasion had upset the normal flow of tribal events, and at the time when Sekwati fled to the north, there was no prospect of his becoming a paramount chief. Malekuti, his elder brother who was poisoned, had never married a tribal wife with tribal cattle. The woman he was to have married in order to produce the successive chief was Kgomo-Makatane. On Sekwati's return to Sekukuniland, she, i.e. Kgomo-Makatane, went to his household; but by then he was already too old to have further offspring, and under these circumstances and in conformity with tribal custom, a certain Kapane was delegated to produce the necessary successor. Kapane's delegations were however irregular since he was not a member of the chief's house. This union resulted in the birth of a male child who was named Mampuru. The child was placed in the care of Sekwati's favourite wife Thorometjane-Phala, whom he had married before he left for the north and by whom he had a son named Sekukuni. Despite these tribal irregularities Mampuru nevertheless remained Sekwati's legitimate successor. Sekukuni, who had developed into a fierce and popular warrior thus prepared himself to challenge Mampuru's claim to the throne, when Sekwati died. His mother, Thorometjane, was apparently aware of his designs and kept him well informed as to Sekwati's condition. When the old chief died, Sekukuni, with the support of his circumcision regiment, the Mabuta, lost no time in seizing his father's headquarters and in burying the deceased chief. This act, as tribal custom has it, automatically established him as chief. Mampuru, the rightful claimant to the throne, was caught unawares by Sekukuni's prompt action and had to flee for his life. Sekukuni pursued him to Manganeng, where he had taken refuge with the Batau. He certainly would have been killed had it not been for the pleadings of Lekgolane, Sekwati's sister. Sekukuni, however, contented himself by cutting the royal beads from his neck.

The other possible claimant to Sekwati's throne was Moyalodi, another of his sons, one older than Sekukuni. He, however, enjoyed no popularity with the tribe and after Sekukuni's coup, fled to the Amandebela of Mabogo.

The South African Republic at this time had not yet asserted any authority over the Pedi and furthermore the burghers were fully occupied with their own factional troubles, so they tactfully acquiesced in Sekukuni's supremacy.

The new chief, Sekukuni I, soon entrenched himself with his followers to become very popular. He objected strongly to the presence and interference of the Berlin Lutheran missionary, Merensky, and ordered him away in 1864 and subsequently set fire to his mission station.

In the years to follow he quietly amassed a considerable quantity of muskets and ammunition, and owing to oppression by Europeans as well as certain Bantu tribes, his followers increased appreciably.

In 1871 Umsutu, with a considerable following, fled from Swaziland to join Sekukuni, and soon afterwards another group of Swazis under Mphle followed. The paramount Swazi chief despatched a strong impis to return the deserters, but the Swazis were defeated heavily. This success (1875) flattered Sekukuni to such an extent that he dared the Republican Government by refusing the entry of European prospectors into his territory. Hostilities between the burghers and Sekukuni culminated on March 7, 1876, when a wagon load of wood belonging to one of the burghers was seized by his people. Heavy fighting followed, in which some of the Swazis joined forces with the burghers. Severe losses and a shortage of food compelled Sekukuni to sue for peace, which was proclaimed on February 12, 1877.
On April 12, 1877, Sir Theophilus Shepstone annexed the Transvaal on behalf of the British Empire and although Sekukuni pretended to welcome the new rulers he refused to observe the terms of the recent peace. He soon indicated that he resented British authority and commenced raiding the country. Armed European and Swazi forces under Sir Garnet Wolseley led to his defeat on November 28, 1879.

During the fight which culminated in the defeat of Sekukuni, his son and heir Moroamoche was killed. Sekukuni, however, escaped and took refuge high up in the Lulu mountains in a cave known as Mamatamageng. Major Clark, known as Tsogwane (alluding to the loss of part of his left arm) followed him there and captured him single handed. He was subsequently sent to Pretoria and imprisoned there.

Since Moroamoche, the legitimate successor, had been killed and the question now arose to whom the Chieftainship should go when Sekukuni died.

Moyalodi, Sekukuni’s elder brother, who at the time of the coup had fled to Mapoch, had two sons, viz., Phetedi and Sekwati. After the defeat of Sekukuni by the British, Sekwati, who was also engaged in the fight, escaped and took refuge with Leganabatho, the mother of Thorometjane at Mphalele. In the absence of another member of the house of Maruteng Leganabatho allowed Sekwati to have intercourse with Thorometjane in order to ensure the future of the ruling house. This union resulted in the birth of a male child towards the end of 1880.

At this time Sekukuni was imprisoned in Pretoria where he received the disturbing news that through the birth of this child the house of Moyalodi was bound to regain possession of the throne.

On August 8, 1881, the Transvaal was retroceded to the Boers and in terms of Article 23 of the Pretoria Convention, Sekukuni was released from prison and allowed to return home where a defined portion of land was allocated to him. He established his headquarters at a place called Manoge situated on the western slope of the Lulu mountains, and sent for Thorometjane and her child, who were taken into his household. He promptly named the child after himself, thus intimating to the tribe that he was to be the future successor. Upon his return to Sekukuniiland Sekukuni was joined by his half-brother Kgolokoe who had been living with Mampuru at Kgono. In the meantime Mampuru had an old score to settle with the man who cheated him out of the Chieftainship, and on the night of August 13, 1882, he and a group of his followers stole along to Sekukuni’s village and as he slept under a shelter in front of his hut assegai him to death (Hunt 1931, pp. 292-303).

**KGOLOKOE I (Period 1882—1893)**

At the time of Sekukuni’s death his nominated successor Sekukuni II was only two years of age, thus necessitating the appointment of a regent. In the absence of any other direct descendant, his half-brother of a lesser house, Kgolokoe, was appointed as regent in 1882. No sooner was he installed as regent than instructions were issued that Sekwati the legitimate father of Sekukuni II had to be executed, which happened early in 1883. Furthermore, he summoned the assistance of the Republic to deal with the murderer Mampuru who, in the meantime, had taken refuge with the Amandebele of Nyabela, the son of Mabogo, generally known as Mapoch.

Despite their own internal troubles, the Transvaal Republic sent a commando under General Piet Joubert to assist Kgolokoe to deal with Mampuru. The ensuing nine months’ campaign of desultory fighting ended on July 11, 1883, when Nyabela surrendered with 10,000 of his tribe, and Mampuru was extradited. Nyabela was sentenced to imprisonment for life and Mampuru was hanged in Pretoria on November 22, 1883.

In terms of the Pretoria Convention of 1881, the London Convention of 1884 reaffirmed the appointment of a commission to demarcate the boundaries of certain Native Locations. Subsequently an area of about 400 square miles was marked out on May 31, 1885 for the Pedi. This location was named after the regent Kgolokoe and was popularly known as Geluk’s Location, the term Geluk being the Afrikaans contraction of Kgolokoe.

The Transvaal Republic, represented by its Native Commissioner Abel Erasmus, was now rapidly enforcing its authority over the Pedi. Kgolokoe was pressed for labour supplies required on the construction of the Delagoa Bay railway and he in turn forced his people into employment on a project which, owing to malaria, was taking a high toll of human lives. Kgolokoe’s acquiescence with Erasmus’ instructions, together with his friendliness towards the missionary Winter, soon landed him in disfavour with his people, and he died an unpopular ruler on June 4, 1893.

Despite his continuous refusal to adopt the Christian faith, the Reverend Winter succeeded in baptising him on his death-bed (Hunt 1931, pp. 304-305).

**RAMOROKO (Period 1893—1894)**

At the time of Kgolokoe’s death, Sekukuni II, the rightful successor to the throne, was still only a child and thus another regent had to be appointed to officiate for him.

The tribe’s choice fell on Kgologalae, the chief wife of Sekukuni I, or Thorometjane the mother of young Sekukuni II, but despite the wish of the people, Native Commissioner Abel Erasmus decided to appoint a certain Ramoroko as temporary regent. Erasmus blundered severely by completely ignoring traditional procedure in the appointment of a new ruler and consequently provoked the intense indignation of the tribe. Pasaone, the head of a large section of the Batau, openly denounced Ramoroko
as regent, and a deputation of the Bamaruteng, on their way to complain to Landdrost Jansen at Lydenburg, was intercepted by Abel Erasmus and some of the members of the deputation flogged, whilst the rest, including Kgogolagae, old Sekukuni's head wife, and Thorometjane, young Sekukuni's mother, were sent to prison in Pretoria where Kgogolagae died, and the rest remained for four years.

Despite all this unpleasantness Ramoroko’s appointment as regent was confirmed by Erasmus. The appointment, however, met with such disapproval that Ramoroko, after the brief regency of a year, suggested to Erasmus that he should resign and that Kgolane, the son of Kgolokoe, be appointed in his place. Erasmus accepted this proposal and Ramoroko died soon afterwards on July 7, 1895 (Hunt 1931, pp. 305-307).

**Kgolane (Period 1894—1896)**

Although Kgolane was only the son of a regent, and thus ineligible, Native Commissioner Abel Erasmus nevertheless appointed him as temporary regent in 1894. Hunt (1931, p. 307) remarks on his appointment as follows: “It is not clear why Abel Erasmus did this: as a Native Commissioner he must have known that it would be quite unacceptable to the tribe. Perhaps he did it purposely to weaken the tribe by creating a division among them, as it should be remembered that the Bapedi were still strong and were in possession of a number of firearms: perhaps he was influenced by the zealous missionary Winter, who did his interpreting, and, being a keen admirer of the late Kgolokoe, wanted the latter’s son appointed. The tribe, almost as a whole, disregarded Kgolane, except in official matters, when forced to do so.”

Erasmus tried to uphold Kgolane’s prestige by instructing the antagonistic headman Kgobalale (see plate 6) and his followers to pay the customary homage, i.e. the three right-side ribs nearest the shoulder of any ox killed (Lehlakore le mošaša) to Kgolane. This instruction was ignored despite threats of arrest and confiscation of cattle.

Matters were brought to a head when Moreano, the son of Moyalodi, was tied up by Kgolane’s followers, and in the ensuing struggle Kgolane was stabbed in the leg and neck. This incident was the sequel to an instruction issued by Erasmus to Kgolane to turn out labour for work on farms. Among others Moreano was detailed to go but as was customary, provided a substitute, Kgolane, however, was not aware of this and when some days later, Moreano was still at home, Kgolane had him tied up. Some of Kgobalale’s followers rescued Moreano and gave Kgolane a beating. This resulted in an attack by Kgolane’s followers who were repulsed by Kgobalale’s men.

On February 9th, 1896, Erasmus, Schalk Burger and Schoeman summoned the parties together at Magnet Heights to hear the cause of their dispute. Kgobalale was ruled wrong, was arrested and sub-sequently imprisoned in Pretoria, and in addition a heavy fine of cattle was imposed on his followers.

Towards the end of February, 1896, General Piet Joubert had a mass meeting at Malagali that he had decided to divide Geluk’s location into two portions with Thorometjane chiefness of the northern portion, and Kgolane chief of the southern portion. Thorometjane was to act on behalf of her son Sekukuni II who, at that time, was about sixteen years old and attending school in Pretoria.

General Joubert’s subdivision was effected on February 29, 1896, when Erasmus, Burger and Schoeman established the dividing beacons and the followers of each faction were instructed to move to their respective areas.

By order of the Executive Council of the Volksraad on December 23, 1896, Kgobalale was exonerated from all blame and allowed to return to Sekukuniand. Furthermore, it was ruled that Kgolane was found responsible for the faction fight and had to return the cattle received from Kgobalale’s followers.

The disruption of the tribe and the appointment of a tribally ineligible ruler mark the commencement of an era of strife and dissension among the Pedi, and although the puppet house of Kgolokoe ruled over one portion of Sekukuniand for several generations, the tribe as a whole never acknowledged its authority.

In the light of the foregoing, historical events relating to the house of Kgolokoe are thus recorded under the rulers of the traditional royal house of Maruteng.

**Thorometjane (Period 1896—1899)**

**Kgolane (Period 1899—1904)**

Subsequent to the division of Geluk’s Location, Thorometjane, the mother of young Sekukuni II, was appointed regent for the northern half of the territory while Kgolane became ruler of the southern half.

Shortly after the subdivision, Rinderpest broke out in Sekukuniand but according to Hunt (1931, p. 309), the losses among the herds of the Pedi were not as heavy as those suffered by some of the other tribes.

The royal (Bamaruteng) faction were very disconcerted about the new arrangements, but realized that they were not sufficiently powerful to offer violent objection so they sought redress by soliciting the services of a lawyer named van Soelen, to fight their case.

Acting on his instructions in a dispute over tax, some misunderstanding occurred which culminated in an unfortunate incident when some of the leaders were lashed by the authorities. This irregularity was pursued by van Soelen, who succeeded in gaining
£5 compensation from the Government for each man flogged, but his attempts to regain the unification of Sekukuniland proved futile.

In the meantime, young Sekukuni II had reached maturity and was brought back from school in Pretoria to Sekukuniland.

Sekukuni II (Period 1899—1943)

House of Kgolokoe:

Kgolane (Period 1896—1904)
Mutlirane (Period 1904—1911)
Kgolokoe II (Period 1911—1939)
Mahlagaunye Kgolane (Period 1939—1941)
Phetedi Kgolokoe (Period 1941—1945)

In 1899 Sekukuni II ascended the throne of the northern portion of Geluk’s Location, thus releasing his mother Therometjane from the regency. Sekukuni immediately made preparations to attack Kgolane, in an attempt to regain supremacy of the whole of Sekukuniland. Immediate action however was inadvisable, since the Republic at that time had a force of burghers posted there to act as tax collectors and guards. However, when the British forces broke through into the Orange Free State and the burghers were withdrawn for reinforcement the opportunity Sekukuni had been waiting for occurred and he lost no time in taking action.

Headman Kgobalale (see plate 6) together with 40 picked warriors launched a surprise attack during the night of June 11, 1900. Kgolane managed to escape but eight of his headmen and a number of his followers, including two women, were killed. Kgolane fled across the Lulu mountains but after a few days returned to Schoonoord from where he travelled under the protection of Commandant Klaas Prinsloo and his small commando to Rietfontein, and from there proceeded to Kruger’s Post to seek help from the Native Commissioner, Abel Erasmus. In the meantime, Kgobalale had attacked Kgolane’s headquarters and killed a large number of his men. Passane, another supporter of Sekukuni, and his Batau, killed off the men of a village at Mangmang, and subsequently joined forces with Kgobalale.

Erasmus at that time had no men to spare but supplied Kgolane with a number of rifles and some ammunition with which he returned to Sekukuniland to seek the help of Malekuti, the son of Mampuru. In the meantime, Sekukuni had launched a successful attack on Mafele, across the Olifants river.

Sekukuni now claimed the chieftainship of the whole of Sekukuniland as far as the Steelpoort river. He subsequently demanded the extradition of Kgolane and when Malekutu refused, a large scale attack on his headquarters was planned. Malekutu would have been overwhelmed had it not been for the assistance of Fourie, the Native Commissioner of Middelburg, who drove Sekukuni’s men off, inflicting heavy losses.

Desultory fighting between the factions continued until October 4, 1900, when British troops under Sir Redvers Buller occupied Lydenburg. Buller issued instructions that all fighting had to cease and appointed Richmond Haig as Intelligence Officer, stationed at Magnet Heights. He enlisted Kgobalale (see plate 6) and Muteu, a prominent supporter and adviser of Kgolane, in his small police force and despite great difficulties succeeded in establishing law and order in the country.

In 1902 civil government was restored in the Transvaal and Sir Godfrey Lagden from Basutoland was appointed administrator of native affairs.

Resultant on representations made by Kgolane supported by Winter, Sub-Native Commissioner Knight agreed to restore him to his previous position as ruler of the southern half of Geluk’s Location. Kgolane was thus officially reinstated in August, 1903, to become a valuable servant of the Government, but to remain an unpopular ruler.

The new government ruled that all natives in the Sekukuniland area were to be disarmed, and with the exception of the Pedi, all tribes acquiesced. This instruction was openly defied at a mass meeting held at Schoonoord on September 3, 1902, but Kgobalale eventually persuaded them to submit.

On April 13, 1904, Kgolane died of consumption and the puppet throne of the southern half of Geluk’s Location became vacant.

At the time of Kgolane’s death his son Kgolokoe II was about twelve years old and his brother Marisane was thus appointed regent, while young Kgolokoe II was attending school at Lovedale.

Hunt (1931, p. 315) records that although the bitter feeling of the tribe against the house of Kgolokoe was never far from the surface and always ready to break out, matters had generally become more settled and the younger men had become accustomed to accept employment on the mines and to pay tax.

The outbreak of East Coast Fever in 1906 was disastrous to the cattle industry of Sekukuniland and by 1911 close upon 20,000 cattle had died as the result of the epidemic or had been destroyed in an attempt to quell the scourge. This severe loss in cattle upset the traditional nyala (dowry) custom of the Pedi and forced the people back to hoe-culture.

To relieve the resultant problems of transport and ploughing, a large number of donkeys were eventually introduced (Hunt 1931, p. 316).

It really began to look as if there was a hoodoo on the untraditionally established house of Kgolokoe, since the newly appointed regent Marisane proved to be a total failure, and according to Hunt (1931, p. 316) “by 1911 he had become a drunken half-imbecile man whom it was no longer possible to prop up as a chief. It therefore again became a question whether to re-assert the chieftainship of the whole of the natives of Geluk’s Location under Sekukuni, or to bring the youthful Kgolokoe back from Lovedale, make him chief of the southern half
of the location and thus continue the official division of the tribe. The former course would have given permanent satisfaction to the tribe and would have enabled it to go ahead free from the constant threat of internal strife and bitterness which is always ready to crop up. The authorities in Pretoria however eventually decided, once more, to the great disappointment of the tribe, not to reunify the chiefship and ordered Kgolokoe II to be brought home from Lovedale and installed in his father’s position."

Kgolokoe II was thus installed as chief of the southern half of Geluk’s Location on July 27, 1911, and according to Hunt (1931, p. 317) proved to be a capable ruler, keeping the peace with Sekukuniland II to whom he always deferred as his “elder brother”. Sekukuniland contributed generously towards the First World War (1914-1918) and no less than 3,300 of its men saw active service in France.

Up until 1922 the Pedi had not yet bought any land, since the contention of a big section was that they were the rightful owners of Sekukuniland anyway, and that it was thus unnecessary to acquire something that already belonged to them. At a mass meeting held at Schoonoord on September 26, 1922, Native Commissioner Hunt, however, persuaded them to impose a levy on themselves at the rate of £1 per annum per tax-paying person as from January 1, 1923, with a view to buying back Sekukuniland gradually.

In 1924-1925 platinum was discovered and the subsequent boom had far-reaching effects on the country; roads were opened up and employment was offered to the people on their doorstep. The boom, however, was of short duration and the last of the mines was closed down towards the end of 1931 (Hunt 1931, p. 318).

On January 25, 1929, Sekukuniland and Kgolokoe II were simultaneously granted civil and criminal jurisdiction by Government Notice 149 of 29 (N.A.D. records, Schoonoord).

The Northern Transvaal including Sekukuniland experienced a severe drought during the years 1933-1935, which in an overstocked area resulted in very heavy losses of stock.

Kgolokoe II died on January 10, 1939, a few months prior to the outbreak of the Second World War, and again Sekukuniland contributed generously towards the war effort (N.A.D. records, Schoonoord).

The authorities persisted in their policy of keeping the Pedi divided and appointed Mahlagalane Kgolane, half-brother of Kgolokoe II on January 11, 1939, to act as regent for Kgolokoe’s son Moramaoche Kgolokoe, then still a minor. The duration of his regency, however, was brief since he died on September 3, 1941 (N.A.D. records, Schoonoord).

In the meantime, the legitimate successor Moramaoche Kgolokoe had enlisted for active service and in his absence Phetedi Kgolokoe, an uncle of Kgolokoe by a lesser house, was appointed regent on December 4, 1941.

After a reign of 44 years Sekukuni II died on July 1, 1943 (N.A.D. records, Schoonoord).

**PHATUDI MORAMOCHE (Period 1943—1944)**

**House of Kgolokoe:**

Phetedi Kgolokoe (Period 1941—1945)

Thulare, the eldest son of Sekukuni II and legitimate heir to the throne, died shortly before his father, leaving no offspring. Thus Phatudi Moramaoche, brother of Sekukuni II, was appointed regent on November 25, 1943. He ruled for 1 year and 1 day only and died on September 26, 1944 (N.A.D. records, Schoonoord).

**MORAMOCHE SEKUKUNI (Period 1945—1953)**

**House of Kgolokoe:**

Phetedi Kgolokoe (Period 1941—1945)

Moroamoche Kgolokoe (Period 1945—1953)

In the meantime, Moramaoche Kgolokoe, the rightful heir to the house of Kgolokoe, had returned from the front to take over the rulership from Phetedi Kgolokoe who had officiated as regent. Phetedi Kgolokoe relinquished the regency on June 30, 1945, and Moramaoche Kgolokoe was appointed chief at a salary of £30 p.a. on July 1, 1945 (N.A.D. records, Schoonoord).

With the death of regent Phatudi Moramaoche (September 26, 1944), Moramaoche Sekukuni, the second son of Sekukuni II and brother of the late Thulare, claimed ascension to the throne of the house of Maruteng. This apparently did not meet with the approval of the tribe, since on December 23, 1944, Native Commissioner Joubert stationed at Schoonoord reported as follows: “The unanimous wish of the tribe is that Moramaoche Sekukuni be appointed acting chief and not chief for the purpose of obtaining a substitute tribal candle on behalf of his late elder brother Thulare who died before his late father Sekukuni II, without male issue by his tribal candle” [tribal wife].

Despite the tribe’s representations, Moramaoche Sekukuni was appointed chief on September 5, 1945, and on December 27, 1946, he and his headman Kgobalale (see plate 6) reported to the Native Commissioner at Schoonoord that a male child had been born to the candle wife Mmankepodi (N.A.D. records Schoonoord).

Sekukuniland, a rugged tract of country which includes the fertile and well-watered Olifants and Steelpoort river valleys and located geographically approximately between Lat. 24°15' and 25°10' and Long. 29° 20'—30° 25', is rich in minerals, particularly asbestos. Although this mineral was discovered at a relatively early date, large-scale developments have really only taken place within the last decade or two.
Hall (1918, pp. 86-88) is quoted on the discovery of asbestos in Sekukuniland as follows: "... the existence of asbestos minerals north of Lydenburg was established at least as early as 1907. The actual discoverer is not known, and the first mention of this asbestos is found in the Annual Report of the Geological Survey of the Transvaal for 1907, where its presence is recorded on the right bank of the Olifants River in Eastern Sekukuniland on farms including some of the present mines. These references are based on the writer's survey of that area during 1907, when several old prospecting pits were found with thoroughly decomposed brownish fibre of remarkable length. On that occasion, Mr. T. H. B. Wayne, general manager of the Egnep and Amose Mines, accompanied the writer. The same kind of deposit was noted, associated with similar country rock of banded ironstone, in the northward progress during 1907 and 1908 as far as Chunlespoort, and many instances of cross-fibre crocidolite were observed in the adjoining district of Hacnertsberg Goldfields, east of Pietersburg. The earliest reference to this crocidolite is furnished by Molengraaf in 1905."

Economically, the development of asbestos is of great significance to the people of Sekukuniland, since one mine alone, the Egnep (Pty.) Ltd. at Penge, employs 150 Europeans and 6,000 African labourers. Unfortunately, a severe slump on the asbestos market was experienced towards the middle of 1953, with numerous mines closing down.

Politically, matters were coming to a head in Sekukuniland when Moroamoche Kgoloke, the ruler of the southern section, died at Madibong (Lord's kraal) on February 18, 1953, after a pathetic and drunken rule of nearly eight years. The Madibong section of the Pedi recommended that he be succeeded in an acting capacity by his younger full brother Kgolane Kgoloke, since the deceased's wife was still of child-bearing age (N.A.D. records, Schoonoord).

Time had proved conclusively that although the dispersing of the Pedi tribe in 1877 was perhaps justifiable in ensuring the safety of the European intruders, it certainly had caused a great deal of dissension and unhappiness among the people as well as serious complications in subsequent administration. Thus prior to the appointment of a successor to Moroamoche Kgoloke, late ruler of the problem house of Kgoloke, the feasibility of reuniting the Pedi under one royal house was reconsidered in administrative circles. At long last the indiscretions of the past were appreciated and on August 20, 1953, Chief Native Commissioner Mark Israel, accompanied by Mr. Durno (Native Commissioner, Schoonoord), Mr. I. C. Prinsloo (Chief Information Officer) and Dr. N. J. van Warmelo (Government Ethnologist), announced at a mass meeting of Pedi tribe members and headmen, held at Malegale, that the authorities had decided that from that day onwards the Pedi tribe were to be reunited under one ruler and that the ruling house was to be that of Maruteng with Moroamoche Sekukuni the paramount chief. Needless to say, this decision was hailed with great joy.

The author happened to visit the Schoonoord area on this particular day, and after the meeting, had the opportunity of interviewing old man Kgobala (see plate 6). He was beaming with satisfaction and all he could say was ga rena bo pedi (we do not have two). What he actually meant to say was ga rena poho tse pedi (we do not have two bulls; i.e. we are reunited under one leader).
CHAPTER VIII

EDIBLE INSECTS OF THE PEDI

Collectively, insects are known to the Pedi as Manyeunyeu and are classified as follows:

**Diboko** : Caterpillars
**Dikhunkhwane** : Beetles
**Dithile** : Locusts and Grasshoppers
**Dithshošwane** : Ants and Termites

The species identified in Pedi dietary are described in accordance with the above classification as follows:

**DIBOKO : CATERPILLARS**

*(Lepidoptera)*

The following *Lepidoptera* are included in Pedi dietary:

**Legakale**
**Mmakonokono**
**Naatl**
**Ngwana Mamahlwehlwana**
**Nôtlô**
**Ndîlelelelele**

They are identified and described as follows:

**LEGAKALE** (see plate 84)

*Identification.* *Gynanosa maia* (Klug).
*Edible Stage.* Fully developed larva.
*Description.* Large opalescent green glabrous caterpillar, 3½-4 in. long; ½-7 in. wide; silvery white, orange-tipped spikes on segment ridges.
*Host Plants.* *Mošwana* (Wildoring: *Acacia cämpylacantha* Hochst.); *Mošêhla* (Huilbos: *Peltophorum africanum* Sond.); *Mošêélê* (Pendoring: *Gyynospora senegalensis* Lam.).
*Generations.* Pedi information indicates one generation only, normally during December and January.
*Method of Collecting.* Collected by hand early in the morning. During the heat of the day, caterpillars are inclined to move to the top of the tree.
*Analysis.* Fresh, whole caterpillars were analysed as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Average unit weight</td>
<td>10.2 g</td>
<td></td>
</tr>
<tr>
<td>Moisture</td>
<td>85.0%</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td>Ether extract</td>
<td>3.3%</td>
<td></td>
</tr>
</tbody>
</table>

*Preservation.* Supplies usually insufficient to warrant preservation.

**MMAKONOKONO** (see plate 85)

*Identification.* *Gononeta postica* Walk.
*Edible Stage.* Pupa.
*Description.* Cocoon, tough parchment-like, 2 in. long, ¾ in. wide, covered with long bristles. Pupa 1½ in. long, ½ in. broad, maroon coloured. Larva, large hairy caterpillar known to the Pedi as piša, not eaten.
*Host Plants.* *Mošwana* (Wildoring: *Acacia cämpylacantha* Hochst.); *Mošêhla* (Huilbos: *Peltophorum africanum* Sond.); *Mošêélê* (Pendoring: *Gyynospora senegalensis* Lam.).
*Generations.* Pedi information indicates one generation only, normally during January and February.
*Method of Collecting.* Cocoons occur on twigs of host plants; picked with stick and rubbed on the ground to remove bristles.
*Analysis.* Fresh pupae were analysed as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Average unit weight</td>
<td>2.1 g</td>
<td></td>
</tr>
<tr>
<td>Moisture</td>
<td>66.7%</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>13.5%</td>
<td></td>
</tr>
<tr>
<td>Ether extract</td>
<td>13.2%</td>
<td></td>
</tr>
</tbody>
</table>

*Preservation.* Not preserved.

**NAATLA** (see plate 84)

*Identification.* *Herse convolvuli* L. (Sweet potato sphinx).
*Edible Stage.* Fully developed larva.
*Description.* Large greyish-green caterpillar, 2¼-3 in. long, ¾ in. wide, tapers towards head, with a long curved spine on posterior segment. Caterpillar curls up when touched.
*Host Plants.* *Convolvuli* sp.
*Generations.* Pedi information indicates one generation only, normally during January and February.
*Method of Collecting.* Collected by hand.
*Analysis.* Fresh, whole caterpillars were analysed as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average unit weight</td>
<td>2.0 g</td>
<td></td>
</tr>
<tr>
<td>Moisture</td>
<td>83.0%</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>7.8%</td>
<td></td>
</tr>
<tr>
<td>Ether extract</td>
<td>4.4%</td>
<td></td>
</tr>
</tbody>
</table>

*Preservation.* Supplies normally insufficient to warrant preservation.

**NGWANA MAMAHLEHALWANA** (see plate 84)

*Identification.* *Bombycomorpha pallida* Dist.
*Edible Stage.* Fully developed larva.
Description. Small, black, hairy caterpillar, 1½ in. long, ½ in. wide, with ridge of orange-coloured hairs down back.

Host Plants. Mohoeloe (Plant not identified).

Generations. According to Pedi information, one generation only occurring during July.

Method of Collecting. Collected by hand.

Analysis. Fresh whole caterpillars were analysed as follows:

Average unit weight .......... 0.45 g
Moisture .......... 82.2% 
Protein .......... 10.5% 
Ether extract .......... 6.1% 

Preservation. Supplies insufficient to warrant preservation.

Nõto (see plate 84)

Identification. Cerina forda Westw.

Edible Stage. Fully developed larva.

Description. Fairly large, black-and-white caterpillar, 2½-3 in. long, ½ in. wide.

Host Plants. Mondô (Wilde sering: Burkea africana Hook).

Generations. According to Pedi information, only one generation during spring.

Method of Collecting. Collected by hand.

Analysis. Fresh whole caterpillars were analysed as follows:

Average unit weight .......... 3.8 g
Moisture .......... 79.6% 
Protein .......... 11.8% 
Ether extract .......... 5.7% 

Preservation. Supplies normally insufficient to warrant preservation.

Nõtolebetsana (see plates 84 and 86)

Identification. Coninbrasia belina Westw.

Mopanie worm, masónjia or masõbjia.

Edible Stage. Fully developed larva.

Description. Large, pretty, orange-and-black caterpillar, 3½-4 in. long, ½ in. thick.

Host Plants. Mophane (Copaifera mopane Kirk); Morula (Sclerocarya caffra Sond.) (see plate 87);

Mõnõtõ (Burkea africana Hook).

In Pedi territory where mophane is exotic, host plants are confined to morula and mõnõtõ.

Generations. The Pedi claim one summer generation in Sekukuniland, but on the mophane in the Limpopo area up to three generations per year have been recorded. The white eggs, approximately the size of a pin's head, are deposited in large clusters on the twigs of the host plant, for the larvae to emerge after the first rains in spring. The larvae are ready for harvesting approximately 3-4 weeks after emergence and are available for approximately 3-4 weeks, when they pupate in the soil, around the stem of the host plant. The second generation, which is normally heavier than the first one, occurs in March and has more or less the same life cycle as that of the first; and even a third generation may occur, depending on good winter rains.

Method of Collecting. Owing to their tight grip on the host plants the caterpillars cannot be shaken off and have to be picked by hand. With a good average infestation a picker can collect 40 lb. of larvae in an hour.

Analysis. Fresh whole caterpillars were analysed as follows:

Average unit weight .......... 5.8 g
Moisture .......... 83.1% 
Protein .......... 10.4% 
Ether extract .......... 3.3% 

Preservation. In mophane areas these caterpillars occur in such profusion that bulk drying is possible. The process of dehydration is described as follows: Evisceration (see plate 88). Three different methods are employed, viz.:

1. The caterpillar is held tightly in the palm of the hand and the stomach contents worked out with the thumb.

2. The contents of the stomach are ejected by simply squeezing caterpillar in palm of hand, fresh caterpillar added to palm and squeezed. In this method a layer of squeezed caterpillars is accumulated in the palm which protects it against the thorny spines.

3. The caterpillar is squeezed between the fingers and the contents of the stomach shaken out. The thorny spines cause such injury to the hands that they become quite bloody and raw after a while.

All three methods employed are rather wasteful, since a large proportion of fat is discarded along with the waste.

The rate of evisceration is approximately 16 lb. of caterpillars per person per hour.

Roasting. The gutted caterpillars are roasted in live cinders for approximately 15 minutes.

Drying (see plate 89). The roasted caterpillars are spread out on specially prepared earth platforms and allowed to dry. A period of 43 hours (24 night and 19 day) was recorded for the product to be sufficiently dry for storage.

Loss in Weight Recorded. The following data were recorded during the process of curing.

Weight of whole fresh caterpillars—37 lb.

Weight after gutting:

Loss in weight 40.5%—22 lb.

Weight after roasting:

Loss in weight 54.5%—17 lb.

Weight after drying:

Loss in weight 84.1%—5 lb. 14 oz.

Commercialism (see plate 90). In latter years these dried caterpillars have been fairly extensively commercialized and are known to the trade as Mopanie worms, Masõnjia or Masõbjia. They are bought by native traders at 7d.-8d. per lb. to be retailed in other areas at up to 2s. 6d. per lb.
Analysis. The cured commercial article was analysed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average weight per caterpillar</td>
<td>2.03 g</td>
</tr>
<tr>
<td>Moisture</td>
<td>5.9%</td>
</tr>
<tr>
<td>Protein</td>
<td>19.1%</td>
</tr>
<tr>
<td>Ether extract</td>
<td>51.1%</td>
</tr>
</tbody>
</table>

**DIKHUNKHWANE** : BEETLES

(Order: Coleoptera)

The Pedi refer to all beetles as dikhunkhwane, and eat the following:

- Kgakgaripane
- Lebetsi-kgomo

These beetles are described as follows:

**Kgakgaripane (see plate 91)**

**Identification.** Polycoleis plumbeus Geurst. and Polycoleis equestris Boh.

**Description.** Large weevil, 1½-2 in. long, plumbeus being all black, whereas equestris is characterized by a red stripe.

**Edible Stage.** Adult weevil.

**Host Plants.** Mošwana (Widtoring: Acacia campylacantha Hochst.).

**Generations.** Pedi claim one summer generation only.

**Method of Collecting.** Collected by hand.

**Analysis.** Fresh whole weevils were analysed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average weight</td>
<td>0.2 g</td>
</tr>
<tr>
<td>Moisture</td>
<td>30.3%</td>
</tr>
<tr>
<td>Protein</td>
<td>2.2%</td>
</tr>
<tr>
<td>Ether extract</td>
<td>51.8%</td>
</tr>
</tbody>
</table>

**Preservation.** Not preserved.

**Kgakgaripane (see plate 91)**

**Identification.** Sternocera orissa Buq.

**Description.** Large greenish-black buprestid, 1½ in. long, ½ in. broad.

**Edible Stage.** Adult beetle.

**Host Plants.** Mosešèlê (Widtoring: Gymnospora senegalensis Lam.); Mošwana (Widtoring: Acacia campylacantha Hochst.).

**Generations.** Pedi information indicates one spring generation only.

**Method of Collecting.** Collected by hand during early morning while still lethargic.

**Analysis.** Fresh whole beetles were analysed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average weight</td>
<td>2.6 g</td>
</tr>
<tr>
<td>Moisture</td>
<td>60.6%</td>
</tr>
<tr>
<td>Protein</td>
<td>21.4%</td>
</tr>
<tr>
<td>Ether extract</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

**Preservation.** Not preserved.

**DITŠIE : LOCUSTS AND GRASSHoppers**

(Order: Orthoptera)

Several species of locusts and grasshoppers occur in Pedi dietary, the most common being:

**Kodi**

*Segongwane*

*Mapha-ta-kalala*

These are described as follows:

**Kodi (see plate 92)**

**Identification.** Zonocerus elegans Thb.

**Description.** This insect derives its name from its elegant bright colouring. Brain (1929, p. 88) describes its colouring as yellow or orange-ringed, or marked with green and black, or bluish, with conspicuous orange-coloured eyes; and the antennae are ringed with black and orange. It is not a swarm locust and does not travel far from where the young hoppers hatch out of the ground.

Fully grown insects vary considerably in size, measuring from about 1½-2 in., exclusive of the antennae. The females are larger than the males and can be distinguished from one another by the shape of the extremity of the abdomen. (van der Meerwe and Kent 1925, p. 5.)

**Generations.** Brain (1929, p. 88) states that its life history is similar to that of other locusts, the eggs being laid in egg-pockets in the ground to hatch after the first rains. The complete generation from egg to adult takes about three months, which indicates approximately two generations per year.

**Edible Stage.** Hoppers as well as flies.

**Host Plants.** This grasshopper is a notorious garden pest, feeding on practically all plants. It is especially fond of the common milkweed (Asclepias fruticosa).

**Method of Collecting.** Collected by hand.

**Analysis.** Fresh whole hoppers were analysed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average weight</td>
<td>0.5 g</td>
</tr>
<tr>
<td>Moisture</td>
<td>62.7%</td>
</tr>
<tr>
<td>Protein</td>
<td>29.2%</td>
</tr>
<tr>
<td>Ether extract</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

**Preservation.** Inadequate supplies normally do not permit preservation.

**Segongwane**

**Identification.** Brown locust, Locustana pardalina Walker.

**Description.** The adult insect is approximately 2½ in. long and as the name denotes, of a brownish colour. It is distinguished from the red locust (Nomadacris septemfasciata Servile) by the fact that it is practically confined to the inland plateau, very seldom reaching the East Coast. It prefers the drier areas with short vegetation and karoo-bush (Faure 1923, p. 4).

**Generations.** The eggs are deposited in the ground and the insect passes through five stages prior to the flying stage. Faure (1923, p. 17) states that the number of generations are dependent on rainfall, temperature, food-supply and natural enemies. Two generations per annum are common, however, with three occurring in certain years.
EDIBLE INSECTS OF THE PEDI

Host Plants. According to Faure (1923, p. 10), all stages are essentially grass eaters, but crops like mealies, wheat, lucerne, oats, rye and potatoes, etc., are also readily attacked.

Method of Collecting. Collected by hand during the night or early morning when still lethargic.

Analysis. Freshly roasted insects, with wings and legs removed, were analysed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>57.1</td>
</tr>
<tr>
<td>Protein</td>
<td>18.2</td>
</tr>
<tr>
<td>Ether extract</td>
<td>21.5</td>
</tr>
</tbody>
</table>

Legs alone yielded the following analysis:

<table>
<thead>
<tr>
<th>Component</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>1.2</td>
</tr>
<tr>
<td>Protein</td>
<td>55.5</td>
</tr>
<tr>
<td>Ether extract</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Preservation. The Northern Transvaal has been free of invasions of this pest for many years now; but while available, the insects were gathered in bulk, to be stewed and dried. The wings and legs, which drop off during drying, are winnowed off; the wings are discarded but the legs are recovered and ground into meal.

MAPHATA-KALALA

Identification. Red locust (Nomadacris septemfasciata Serville).

Description. Faure (1935, p. 11) describes the red locust as the largest of all migratory locusts, reaching a length of nearly 3 in. from the front of the head to the tip of the folded wings. It is rather slender, of compact, neat build and has relatively long wings. It differs from the brown locust Locusta migratoria in that it is primarily a lover of tropical and sub-tropical regions, and its excursions into the open grass-veil plains of the Western Transvaal, Orange Free State and the southern Kaahari are, therefore, probably to be regarded as exceptional occurrences. No swarms have invaded the Northern Transvaal since 1937.

Edible Stage. Hoppers as well as fliers.

Generations. According to Faure (1935, p. 23) there is only one generation of the red locust in a year in Southern Africa.

Food Plants. Although the insect feeds mainly on grass or plants of the grass family, it also readily attacks a great variety of other plants.

Method of Collecting. Collected in bulk by hand during the night or early morning when still lethargic.

DITŠHOŠWANE: ANTS AND TERMITES

(Order: Hymenoptera and Isoptera)

The Pedi do not distinguish between ants and termites, but class them together as ditšhošwane. They eat ntlhwa, an ant and lekêkê, a termite, which are described as follows:

DINTLHWA (see plate 93)

Identification. Carebara vidua Sm.

Description. Large flying-ant sexuals; females (dintlhwa makhura), black, ¾ in. long, with distended egg sack; males (dintlhwa bogwane), reddish-brown, ¾ in. long, smaller than females.

Edible Stage. Flying sexual.

Generations. Several; dependent on summer rains, normally about three or four per year.

Method of Collecting. Collected by hand as they emerge from the ground (see plate 94).

Analysis. Fresh whole ants were analysed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>60.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Protein</td>
<td>25.2</td>
<td>7.4</td>
</tr>
<tr>
<td>Ether extract</td>
<td>3.3</td>
<td>23.8</td>
</tr>
</tbody>
</table>

LEKÊKÊ

Identification. Termes badius.

Description. Flying sexuals of Termes badius are approximately ¾ in. long.

Generations. Several generations occur during the year; appearing after heavy rains in the summer.

Edible Stage. Flying sexual.

Method of Collecting. Normally the termites are snapped up as they emerge from their holes in the ground, but children also swat them out of the air with branches.

Preservation. Not preserved.

SUMMARY AND DISCUSSION

The insects identified in Pedi dietary are listed in table 16 and their relevancy to other diets is discussed as follows:

ANTS (Hymenoptera)

Termites (Isoptera) which appear to be of greater significance in primitive dietary than ants are often erroneously referred to as the latter. Their distribution in primitive dietary is reviewed as follows:

AFRICA

The large black flying ant Carebara vidua Sm., known to the Pedi of the Northern Transvaal as ntlhwa, plays a significant role in the dietary of these people. They may be eaten either raw or roasted and are considered a very appetizing relish served with grain-meal porridge. The females with their large egg-sacks have a much higher fat content than the males and are consequently preferred.

Unfortunately this valuable food becomes available only after heavy rains, and may thus not be procurable for more than five or six times per year.

The winged queens of Carebara vidua have also been reported as food in tropical Africa (Bodenheimer 1951, p. 193).

The Pahouins of Gaboon eat a certain ant known
as *atchongou* which is pounded with a certain herb and prepared into a very popular dish (Bodenheimer 1951, p. 193).

**NORTH AMERICA**

Bodenheimer (1951, p. 286) states that it is generally known that certain American Indian tribes use ants as food, and quotes Muir (1916, p. 46) who reported the eating of a wood-boring ant (*Camponotus* sp.) by the Digger Indians in California.

**SOUTH AMERICA**

The Indians of Amazonia eat the great-headed ant *Souab* (*Atta Cephalotes* Latr.) alive, as a relish with porridge. When slightly smoked or roasted with salt they are claimed to be very palatable and sought after by Europeans as well (Bodenheimer 1951, p. 304).

**AUSTRALIA**

The following honey ants have been identified in Aborigine dietary, viz. *Melophorus infatus* Lubb (Yarumpa); *Melophorus Cowley Fogg* (ttoootoonee); *Melophorus bagoti* Lubb and *Leptomyrmeex varians* Em. These ants with their characteristic honey-filled distended abdomens are greatly sought after by the Aborigines, and function probably more as a delicacy than as a food. Normally only the honey-bags are eaten, but it is claimed that both the pupae and adults of certain species are also eaten. The popularity of these ants is indicated by the fact that certain rituals are performed to provoke an abundance of them (Bodenheimer 1951, pp. 103-106).

**INDIA**

The green weaver-ant (*Oecophylla smaragdina*) is eaten throughout almost the entire Orient and according to Bodenheimer (1951, p. 233) is added with curry, to the rice dish in Kanara and other parts of India, Burma and Siam.

A certain species of red ant constitutes a regular article of food to the Murries of Baster in the South of the Central Provinces. Quoting Long (1901, p. 536), Bodenheimer (1951, p. 233) describes their usage as follows: "The ants are pounded into a pulp, and lumps the size of a goose's egg are wrapped in sal-leaves, in which form this commodity is commercialized." The product is mixed with salt, tumeric and chillies and eaten raw with rice. It may also be prepared into a thick paste, using rice-flour, salt and chilies. This latter preparation is considered to produce resistance against fatigue and the sun's heat.

**MEXICO**

The natives of New Granada prepare fricasses from ants which are reared especially for this purpose and the Maravano and Marguarite Indians eat ants mixed with resin (Bodenheimer 1951, p. 300).

**SIAM**

The Siamese eat the pupae of the weaving ant (*Oecophylla smaragdina* F.) and the Laos eat both pupae and adults. The adults, larvae and pupae of an unidentified red ant are also eaten by these people, the various stages of the insect being pickled in salt water, tamarind juice, ginger, onion, a little sugar and the leaf of *Citrus hystrix* (Bodenheimer 1951, p. 261).

**TASMANIA**

The pupae of certain ants are considered a delicacy among the people of Tasmania. The following species have been identified by Noetling (1910, p. 290):

- *Myrmecia pyriformis*, *Colobopsis graseri* and *Camponotus consobrinus* (Bodenheimer 1951, p. 135).

**BEETLES (Coleoptera)**

Beetles function as food in the following dietary systems:

**AFRICA**

The Buprestid, *Sternocera orissa* Buq. and the weevils *Polybleps plumbeus* Guer. and *Polybleps equestris* Boh. have been identified in the dietary of the Pedi of the Northern Transvaal, their host plants being *Moschell* (*Gynnospora senegalensis*) and *Mośwana* (*Acacia camphycanthoida*).

These beetles, and the large *Sternocera orissa* especially, are greatly sought after and difficulty was experienced in collecting specimens in close proximity to villages. It was observed that the Pedi housewife displays no concern in preparing food from weevil-infested grain or meal and unceremoniously includes them in her dishes.

Junod (1913, p. 65) observed that the Thonga eat a big Buprestid beetle known as *shithabelo*.

While dung beetles are of common occurrence in the dietary of the Far East, the Pedi abhor the idea of eating the local *Scarabæus sacer* (*kgoba-bolókó*).

**SOUTH AMERICA**

The natives of Chile and Peru use the beetles *Elmis chilensis* Phil. and *Elmis condimentaria* Phil. in the preparation of their national soup-dish known as *chichi* (Bodenheimer 1951, p. 308).

**AUSTRALIA**

Lumholtz (*vide* Bodenheimer 1951, p. 101) reports that the longicorn beetle (*Eurynassa oedewalni* Pasc.), as well as its larvae, is eaten by the natives of northern Australia. Several species of wood beetles are also used as food.

**BURMA AND MALAYA**

Various species of beetles are collected by means of light traps and sold as food. The big dung beetle, *Heliocoris burchellii*, is claimed to be in great demand amongst the Shan (Bodenheimer 1951, pp. 268-9).

**CHINA**

The beetles commonly used as food in China are...
covered in a report by Hoffman (1947) quoted by Bodenheimer (1951, p. 271) as follows: "Dytiscid and Hydrophilid beetles are very commonly consumed in the Kwangtung province and in other places, where Cantonese dwell. Although usually kept in separate containers customers very frequently buy some of each family. They care less for the Hydrophilidae, which consequently are cheaper than the Dytiscidae, and both are cheaper than the giant water-bugs. The common people believe these insects belong to the same species, the Hydrophilidae being regarded as the males. Both are eaten as medicine and as confection, being considered as an anti-diuretic. They are dropped into a hot brine and appear very greasy as offered for sale, the cooking apparently hastened the process of oil coming to the surface. The odour of some of these beetles is even more offensive when cooked than when fresh. In eating, the elytra, legs and certain other chitinous parts are discarded. One or two medium-sized species and a number of large ones are used as food, such as Hydrox paltilpilalis McLeay, of N. China and Tibet, Hydrox bilineatus McLeay, of S. China and Indo-China, Hydrox cavisternum Bdl. of Hainan island, Hydrox hostatus Hbst. of Kwangtung and Indo-China, Cybister hengalenis Aub., Cybister guerini Aub., Cybister japonicus Sharp, Cybister limbatus Falz., Cybister sigillatus Er. and Cybister tripunctus Ol."

INDONESIA

Quoting Leefmans, Bodenheimer (1951, p. 236) writes that in Java and Sumatra the natives use stones dyed red with the fruit of capsicum to attract the male beetles of Leucopholis rovida F., which are roasted and eaten.

INDO-CHINA

Bodenheimer (1951, p. 267) mentions the usage of a Hydrophilid beetle as food in Indo-China.

JAPAN

Dytiscid and Elaterid beetles are reported as food in Japan (Remington 1946, vide Bodenheimer 1951, p. 279).

MADAGASCAR

Cybister hova is reported to be eaten fried, and is in such demand that generally it can be afforded only by the rich (Decary 1937, vide Bodenheimer 1951, p. 200).

MEXICO

The beetles Cicindela curvata Chevr. and Cicindela roseiventris Chevr. are macerated in water or alcohol and fermented into a stimulating drink of exceptional fragrance (Bodenheimer 1951, p. 300).

NEW GUINEA AND POLYNESIA

In Dutch New Guinea, the Papuans eat a big unidentified brown beetle (Dynamisid). (Leefmans, vide Bodenheimer 1951, p. 136.)

SIAM

Beetles play a prominent role in the diet of the Siamese; and the following species have been reported as food (Bodenheimer 1951, pp. 257-8), Adoretis compressus Web. Popular throughout Ubon but not commercialized.

Sterocera eugensiana Saund. Bred by the Chinese and sold on the Bangkok market at 4d. per piece.

Cybister limbatus F. Collected in nets, eaten roasted.

Oryctes rhinoceros L. A large brown dung beetle, used in curries or eaten alone roasted. The flavour is described as mild, pleasant and vegetable.

Xylopterus gideon L. Not very popular.

Heliothrips Sp. A very large (5 cm.) black beetle used as both food and medicine; sold at Lambang at 4d. per piece.

Onitis vires L. Common in cattle dung at Hua Hin, roasted with salt.

In addition to the above species, Lepidota stigma F., Leucopholis sp. and Rhynechothorax schah F. are also eaten.

BUGS (Hemiptera)

Bugs are reported as food in the following dietary:

AFRICA

No evidence of bug-eating could be traced amongst the Pedi of the Northern Transvaal.

According to Mjelle (1934, p. 37) the Harugwa bug, Eucoxotum (Haplosternum) delagoraei Spn. is an important food of the Bkita of Southern Rhodesia. These bugs, which arrive in great numbers at the end of the rainy season, i.e. April-September, to feed on the leaves of the wild loquat, are considered tribal property and are so greatly sought after that serious quarrels occur when tribal boundaries are transgressed.

Bodenheimer (1951, p. 191) quotes Faure, who reported in 1944 that this bug (Eucoxotum delagoraei Spn.) occurs in profusion on Acacia ataxacantha australis B.D. on the eastern slopes of the Drakensberg at 700 to 1,400 m. altitude. The Mapulana from this area call them Tshonono and prize them greatly as food.

In Egypt the eggs of the water-bug, Corixa escu-
tenta, are eaten (Bodenheimer 1951, p. 206).

CHINA

In Canton, Hong Kong and Shanghai the giant water-bug, Lethocerus indicus, is relished as a delicacy (Bodenheimer 1951, p. 272).

INDO-CHINA

Bodenheimer (1951, p. 266) writes that the large water-bug, Belostoma indica (ca-cuang), is collected for its meat as well as for a pungent liquid contained in two long-coiled tubes in the thorax. This odorous liquid is used to season certain dishes.
The bugs are not very fleshy, but the thorax contains a mealy matter which constitutes the bulk of the edible matter.

MADAGASCAR

The water-bug, *Nepa*, and others are eaten by the people of the high plateau, but are not very popular (Bodenheimer 1951, p. 201).

MEXICO

Quoting D'Ancona, Bodenheimer (1951, p. 298) states that the Pentamom bug, *Euschistus zopilotensis* Dist. and *Atitzes taoensis* nov. sp., are used as food.

The water-bug known as *ahautele* or *bledo del agua* is widely eaten, and the eggs which are deposited on bundles of rush placed in the water for this purpose are collected and ground into a meal from which the popular hauntle cakes are prepared (Bodenheimer 1951, pp. 297-8).

SIAM

The large water-bug, *Lethocerus indicus* L. and M., is a great delicacy of the Laos and Siamese, and is normally served at royal banquets in Bangkok. These beetles with their gorgonzola-like flavour are retailed at 1d. to 4d. per piece on the markets in Bangkok.

The following water-bugs are also eaten: *Sphaerodema rutila* F., *Sphaerodema molestum*, and *Laccotrephes grisea* Guér. (Bodenheimer 1951, p. 259).

CATERPILLARS (Lepidoptera)

Next to locusts (Orthoptera), caterpillars probably find widest use in primitive diets; and although European convention classes them as repulsive, there is no legitimate reason why they cannot be considered as good, wholesome food. Bodenheimer (1951, p. 68) quotes Walkenaar, who relates that the famous 18th century astronomer, De Lalande, upon his return to France used to visit the naturalist, Quatremere D'Ixionville, to feast on caterpillars which he claimed tasted like stone-fruit.

The distribution of caterpillars in certain diets is reviewed as follows:

AFRICA

The following Lepidoptera larvae were identified in Pedi dietary, *Cominbrasia belina* Westw., *Girina fonda* Westw., *Herse convolvuli* L., *Bombycosomphora pallida* Dist. and *Gynanisa maia* Klug. All these larvae are greatly sought after and when available play an important part in the nutrition of these people.

It is interesting to note that whereas all other species become available during summer, *Bombycosomphora pallida* occurs in winter.

*Cominbrasia belina*, which is by far the most common of all identified species, has in latter years become an article of considerable commercial signifiance in the Northern Transvaal. During the summer months in a good rainy season these caterpillars occur in profusion on *Copafera mopane* Kirk, the well-known indigenous mopane fodder-tree of the Northern Transvaal and has prompted its popular appellation, viz. mopane worm. Native vernacular identifies them also as *masotja* or *masonja* as derived from the native vernacular for soldiers *masotja*, which they eminently simulate when on the march.

In Pedi territory where the mopane is exotic, these caterpillars occur on *Selerocarya cafra* (marula) and *Burkea africana* (wild senna).

A fairly extensive trade in roasted-dehydrated mopane worms has been built up in the Northern Transvaal, the product being bartered by native traders at 7d.-8d. per lb. and retailed at 2s. 6d. per lb. Information obtained from a trader indicates that he alone handles over 1,000 bags (±70 lb.) of these caterpillars per annum.

In an attempt to determine the popularity of this food, tests conducted indicate that the Pedi gives preference to a ¼ lb. of these caterpillars to 1 lb. of fresh beef. Further proof of popularity is indicated by the fact that in a trading business closely associated with the author, these caterpillars when made available at 1s. 3d. per lb, seriously affect the sale of beef at 9d. per lb.

Livingstone (1875, p. 111) reported that a large caterpillar *lopname* feeding on the leaves of *mophane* (Bauhinia) enjoyed wide popularity, despite the presence of abundant game. This caterpillar was probably *Cominbrasia belina*, which to-day still plays a significant role in the dietary of the Tsawa. The explorer (p. 102) also reported that in passing through these hills (i.e. the Damangwato which are part of the range known as Bakaa) on their way north they entered a pass named *Manakalongwe* or Unicorn's Pass. The unicorn here is a large edible caterpillar, with an erect horn-like tail.

Livingstone (1875, p. 31) mentions that while in Bechuanaland, scarcity of food supplies compelled his children to eat certain large caterpillars which he considered could not be unwholesome since the natives were very fond of them and consumed them in large quantities.

Junod (1913, p. 64) writes that the Thonga eat a large caterpillar known as *Matome*. This caterpillar (*Urota sinope*) is to be found on the *Nhanya* tree during October. The Reverend apparently did not share the native's zest for this dish and comments, "to see it is quite sufficient... and they enjoy it". Other species of edible caterpillars recorded by him are *Anthoiera cafraea*, *Anthoiera numippe* and *Anthoiera zambeziana*. Barker (1951, p. 17) reports from Nyasaland that several species of caterpillars are used as food. Analyses indicate that they contain a fairly high proportion of protein and varying amounts of fat. It is customary to name the caterpillars after their food trees, e.g. *mphalabungu*, *kaweti*, *mabwabwa*, *kaondo*, etc.
In Southern Rhodesia, according to Duncan (1933, p. 103) the Shona eat the following caterpillars—*madora*, *magandare*, *nova*, *mashonjwa*, *arati* and *zuvisi*.

Caterpillars play a significant role in the diet of the Bemba of Northern Rhodesia and as Richards (1939, p. 39) points out, make a considerable contribution towards their animal protein requirements.

The following analysis of dried caterpillars conducted by Dr. E. M. Widdowson is published by Richards (1939, p. 409):

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>...</td>
<td>...</td>
<td>65.0%</td>
</tr>
<tr>
<td>Fat</td>
<td>...</td>
<td>...</td>
<td>5.0%</td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>...</td>
<td>...</td>
<td>0.0%</td>
</tr>
<tr>
<td>Calcium</td>
<td>...</td>
<td>...</td>
<td>0.16%</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>...</td>
<td>...</td>
<td>0.77%</td>
</tr>
<tr>
<td>Iron</td>
<td>...</td>
<td>...</td>
<td>7.3 mg/100 g</td>
</tr>
</tbody>
</table>

Platt (1945) published the following analysis of fresh edible caterpillars from Nyasaland.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>75-85 mg/100 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water range</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Selected value</td>
<td>...</td>
<td>...</td>
<td>80</td>
</tr>
<tr>
<td>Calories</td>
<td>...</td>
<td>...</td>
<td>83</td>
</tr>
<tr>
<td>Protein</td>
<td>...</td>
<td>...</td>
<td>14</td>
</tr>
<tr>
<td>Fat</td>
<td>...</td>
<td>...</td>
<td>3</td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>...</td>
<td>...</td>
<td>0</td>
</tr>
<tr>
<td>Calcium</td>
<td>...</td>
<td>...</td>
<td>20 mg/100 g</td>
</tr>
<tr>
<td>Iron</td>
<td>...</td>
<td>...</td>
<td>0.5</td>
</tr>
</tbody>
</table>

According to Bodenheimer (1951, p. 140-141) the large, ugly, black velvet-coated Saturnid larvae of *Bunaea castraria* are used as food by the Matengos near Lake Nyasa, and in several parts of Tanganyika the larvae of the wild silkworm *Anaphe infraesta* occurring on *Bridelia micrantha*, are eaten.

Berensburg (vide Bodenheimer 1951, p. 142) reports that the natives of Natal eat the larvae of *Gynanica maia*, *Nudaurelia belina* and *Bunaea cadra*.

The Pangwe of South Cameroon include 21 different species of caterpillars in their dietary, some of which, as well as their food plants, are distinguished by name (Bequaert vide Bodenheimer 1951, p. 188).

**North America**

According to Bruces (1942, p. 420) the Pueblo Indians of California eat the larvae of the giant silkworm, *Coloradina pandora*, which feeds on pine trees.

**South America**

In the Peruvian Andes, a caterpillar somewhat resembling the silkworm and known as *susillo* is collected in large quantities from *Mimosa nigras*, and is a considered delicacy (Pere Galanche as quoted by Bodenheimer 1951, p. 307).

Quoting Dagguin (1900, p. 7), Bodenheimer (1951, p. 307) relates of the larvae of a *Hepalid* moth, known to the Mundracos of Central America as *maquara*, which when eaten, head and all, cause acute intoxication. Obviously these larvae enjoy wide popularity.

**Australia**

One of the most important insect foods of the Central Australian aborigine is the *witchetty* grub. This insect, according to Bodenheimer (1951, p. 82), is associated with certain very important rituals; it has not been identified yet but is believed to be the larva of the ghost moth (*Hepialidae*). These larvae, which attain a length of 5 cm., are roasted on hot ashes and are claimed to taste like scrambled eggs. Other larvae identified in aborigine dietary are those of the great Australian Cossid *Xyleutes eucalypti*; *Xyleutes boisduvalii* and *xigops grandis* (Bodenheimer 1951, pp. 85, 100).

**Burma**

Silkworm larvae known as Po-kuang-gyaw are sold at 1$1$ rupees per $\frac{3}{4}$ lb. and are eaten fried, fresh or stored for further use (Bodenheimer 1951, p. 269).

**China**

Szechuan province is famous for its caterpillars (*Hepialidae*) which are commonly infected with the fungus *cordyceps*. This infection produces a long strand of fungal growth from the caterpillar, by which they are tied into bundles. Such caterpillars are very expensive and can be afforded only by the rich, who consider them a delicacy as well as a tonic (Bodenheimer 1951, p. 272).

**New Guinea and Polynesia**

Bodenheimer (1951, p. 136) quotes Lecomans who reported the use of certain large caterpillars as food.

**Indonesia**

Larvae of *Hyblea puera* are reported to be used as food in Indonesia (Bodenheimer 1951, p. 236).

**Madagascar**

Bodenheimer (1951, p. 201) reports that the larvae of *Debarrea malagassa Hw.*, a common pest on peach trees and mimosas, are eaten boiled or roasted in the Tananariva area.

**Mexico**

The larvae of *Aegiale hesperialis* Walk. are eaten as appetizers by the Zapotec Indians near Oaxaca, and a certain caterpillar found on cactus is a common dish served in fashionable restaurants (Bodenheimer 1951, p. 295).

**Siam**

Larvae of the coffee-borer, *Zeuzera coffeae*, known in Siam as *duang* constitute a popular foodstuff and it is reported that the late King of Siam was very fond of them roasted and eaten with salt and rice. The larvae of *Xyleutes leuconotus* are also eaten (Bodenheimer 1951, p. 261).

**Tasmania**

Very little information is available about the extinct natives of Tasmania or Van Diemen's Land,
but according to Davies (1846, p. 414) they ate a large white caterpillar found in decayed wood (Bodenheimer 1951, p. 135).

COCKROACHES (Orthoptera)

The Pedi of the Northern Transvaal shudders at the idea of eating the cockroach (mafêle), but in Siam Blatta orientalis L. and Stylonypha rhombifolia st. as well as their eggs are eaten; and the Chinese are reputed to eat Periplaneta americana and Periplaneta australasiae (Bodenheimer 1951, pp. 260, 277).

CRICKETS (Orthoptera)

Crickets are included in the following dietary:

AFRICA

In Uganda the mole cricket Gryllotalpa africana is kept as a singing insect, but is also used as food (Bodenheimer 1951, p. 193).

The Pedi of the Northern Transvaal recognize two species of crickets, viz. mambokadzi or tsiritsiri (domestic cricket) and sentsêtsêrê or sentsêtsêrê (mole cricket) neither of which is used as food.

BURMA

The big brown cricket, Brachytrypes portentosus, is sold as food in the markets of Mandalay (Bodenheimer 1951, p. 268).

INDONESIA

Bodenheimer (1951, p. 236) mentions the usage as food of the mole cricket Gryllotalpa anding jena.

JAPAN

Reports indicate that crickets are widely used as food in Japan, all varieties being eaten (Bodenheimer 1951, p. 280).

SIAM

The Siamese who are notorious for their entomaphagous habits eat the following crickets: Gryllus testaceus Walk., Brachytrypes portentosus Licht., Liogryllus bimaculatus de Geer, as also the mole cricket Gryllotalpa africana Beav. (Bodenheimer 1951, p. 260).

DRAGON FLIES (Odonata)

Dragon flies are reported as food from the following territories:

AFRICA

Dragon flies known as fara are reported to be eaten in Nigeria (Bodenheimer 1951, p. 193). In the Northern Transvaal the Pedi know the dragon fly Calopterys verge as sesekwe sekure but it could not be traced in their dietary.

CHINA

Reports from China indicate that the larvae of dragon flies are used as food (Bodenheimer 1951, p. 278).

INDONESIA

Wallace reports that the natives of Lombok catch dragon flies with bird-line, and that fried with onions they are considered a delicacy (Bodenheimer 1951, p. 237).

MADAGASCAR

Bodenheimer (1951, p. 200) quotes instances where the larvae of dragon flies are used as food in Madagascar.

SIAM

In the Ubon district Anax guttatus Burm. is reported to be eaten (Bodenheimer 1951, p. 260).

FLIES (Diptera)

In the lake areas of Victoria and Nyasa, the lake fly Chaoborus edulis occurs in masses, actually simulating smoke-screens. The flies are collected in great quantities to be converted into food-cakes with a caviar-like flavour (Bodenheimer 1951, pp. 141 and 194). The Indians in the Mono lake area, California, eat the pupae of the common brine fly Ephydra hians whilst those of Utah and Nevada eat the maggots of Ephydra gracilis (Bodenheimer 1951, p. 292). Flies which are known collectively as dintši to the Pedi are not used as food.

LICE (Hemiptera)

Although head lice (Pediculus capitata) as well as body lice (Pediculus corporis) occur in certain entomophagous dietary, the profound disgust displayed by Pedi informers interrogated to this effect leaves no doubt that they are not included in their dietary. Lice are known to the Pedi as dintä.

The Aboriginal of Australia welcomes his guest by resting his head in his lap, to pick and eat the lice (Lumholtz 1890, vide Bodenheimer 1951, p. 134). Eating of head lice was observed in Tasmania in 1792 by the French naturalist Labillardière (Bodenheimer 1951, p. 135).

Quoting Kolben, Bodenheimer (1951, p. 194) refers to the eating of lice amongst the Hottentots in South Africa, who quite logically maintain that if the lice could eat them, there should be no reason why the process should not be reversed.

It is reported, that in Mexico, where lice are sold as food, the Indian women of the Province of Cuenca rid each other of the vermin which are subsequently eaten (Bodenheimer 1951, p. 300).

On the eating of lice by the Indians of the Ama-
zonzon, Bodenheimer (1951, p. 305) quotes Wallace (1853, p. 244) as follows:

"Head lice of men are probably more a delicacy than an article of food and they are caught exactly in the same way the monkeys catch them in the Zoo. A couple of Indian bellies will often devote a spare half hour to entomological research in each other's glossy tresses, every capture being immediately transferred with much gusto to the mouth of the operator."

The Fangue of the Cameroons are reputed to kill head lice with a special hair oil, and to eat them (Bodenheimer 1951, p. 139).

The missionary De Smet observed that the Cheyenne, Snake and Ute Indians of North America relished lice and that it was customary for chiefs when visiting each other to remove their shirts and while chatting, pick and eat the lice from them (Bodenheimer 1951, p. 289).

LOCUSTS AND GRASSHOPPERS (Orthoptera)

Of all edible insects, the locust is undoubtedly of greatest consequence. In the Middle East it is recognized as a food of great antiquity. Bodenheimer (1951, pp. 40-41) writes that in the palace of Asurbanipal near Nineveh (8th century B.C.) we find among the servants bringing the various dishes to a royal banquet, one who carried locusts arranged on sticks. In Leviticus (XI: 22) we read: "These you may eat; the arbeh after his kind, the sa'ench after his kind, the chargol after his kind, and the chagow after his kind." The traditional translations are erroneous. The arbeh is the adult of the desert locust (Schistocerca gregaria Forsk.), the same locust which appeared in the banquet at Nineveh, while the other names doubtless refer to various stages of development of the same locust. Other grasshoppers may also have been eaten as we read (Leviticus XI: 21): "You may eat of all winged creeping things that go upon all fours, which have legs above their feet, wherewith to leap upon the earth."

Yet none of them was sufficiently abundant to provoke differentiation of names for their various species. The permission to eat locusts is nothing more than a codification of a habit existing since oldest times among the nomads of the Middle East, which has lasted down to our day. In the New Testament, St. John is mentioned as nourishing himself upon locusts and wild honey (Matthew III: 4) and in the Mishnah (translated by Danby 1933, p. 518) we find in the treatise Hullin (3: 7) the following interpretation: "Among locusts (these are clean), all that have four legs, four wings, and pointed legs, and whose wings cover the greater part of their bodies." Rabbi Jose says: "Or (all) that are called by the name 'locust'." And in the treatise Kelim (p. 640: 24: 15) there is mention of the leather gloves worn by locust-catchers. The Jerusalem and Babylonian Gemaroh also talk about locusts and their gathering for food.

Among the Greek historians and geographers we find references to a people called Acridophagi or locust-eaters. Diodorus of Sicily (2nd century B.C., Historia III: 2) talks about the Acridophagi of Ethiopia as small, lean and sparse, and extremely black men. When in their country in spring the south winds rise high, they drive out of the desert an infinite number of locusts, of an extraordinary size, with dirty wings of an unpleasant colour. These provide plentiful food and provisions for them all their days.

The dietary significance of locusts in different parts of the world is reviewed as follows:

AFRICA

Locusts probably find their widest dietary usage in the African continent and prior to their successful control with modern insecticides and equipment, played a most significant role in the sustenance of many peoples.

Bodenheimer (1951, pp. 160-162) states that while locust invasions were and are a plague for all agricultural peoples, they are a "manna" for primitive food gatherers all over Africa and quotes Bequart (1921, p. 193) who asserts that in many poor regions of South Africa flights of locusts are such a blessing that the medicine-man sometimes promises to bring them instead of rain.

Prior to 1937 very heavy invasions of both the brown locust (Locusta pardalina) and the red locust (Nomadacris septemfasciata) occurred periodically in the Northern Transvaal and although the brown locust is still prevalent in certain parts of the Eastern Cape, no invasions have occurred in these parts since.

The Pedi unhesitatingly claim locusts as their most popular indigenous meat and the arrival of a swarm of these insects was viewed as a mixed blessing. The insects, which become lethargic when cold, were collected in great quantities during the night and it was not uncommon to see wagons loaded high with bags of locusts. Although these people feasted on fresh roasted locusts, the bulk was stowed in huge pots and subsequently spread out in the sun to dry.

The dried insects, of which the wings and legs drop off with drying, are stored and used as a relish. The wings are discarded but the legs are ground into a powder which is greatly enjoyed as a relish with grain-meal porridge.

Several species of grasshoppers are eaten by the Pedi but owing to their solitary habits cannot be collected in any quantity and consequently play a minor role in the dietary of these people. Grasshoppers are eaten mainly by the herds, and it is a common sight to see boys chasing these insects which when caught are impaled on a twig and roasted.

While available, locusts were greatly sought after as food in BechuanaLand. Livingstone (1875, p. 31) reported that owing to shortage of supplies he and his family were sometimes compelled to eat locusts,
which apparently did not appeal to his palate. He admits, however, that roasted, he preferred them to
shrimps but would avoid both if possible. Junod (1913, p. 65) was equally little impressed with the
taste of locusts and described them as essentially nauseating.
Duncan (1933, p. 103) reports the use of locusts (*madzomba*) as a relish among the Shona people of
Southern Rhodesia, and in Nyasaland where they are known as *dzembe*, Barker (1951, p. 16) mentions
their usage as food.
The Bemba of Northern Rhodesia know locusts as *amakanta* and use them as food. Richards (1939,
pp. 408-9) published the following analysis of locusts from Bemba territory:

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<thead>
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</thead>
<tbody>
<tr>
<td></td>
<td>Protein</td>
<td>8.0%</td>
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<tr>
<td></td>
<td>Fat</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>Carbohydrate</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>Calcium</td>
<td>0.16%</td>
</tr>
<tr>
<td></td>
<td>Phosphorus</td>
<td>0.77%</td>
</tr>
<tr>
<td></td>
<td>Iron</td>
<td>7.3 mg/100 g</td>
</tr>
</tbody>
</table>

Stow (1910, pp. 58-59) describes the arrival of a swarm of locusts as a glorious time of harvest to
the Bushmen of the Kalahari. They pound the roasted insects into a powder which is made into a porridge,
or mix it with honey into cakes.
Locusts are widely used as food in North Africa and provided they are taken alive and killed by
Moslems they are legitimate food to the followers of Islam, such permission being recorded in the
Koran, verse 19, which reads “Many hadiths prove that God has given the locust to man as food.”
(Bodenheimer 1951, p. 203).
Chaniyar, as quoted by Bodenheimer (1951, p. 204), reports that smoked locusts are brought in prodigious
quantities into the markets in Morocco. Their taste is described as oily and rancid, which habit alone
can render agreeable.
According to Jackson (Bodenheimer 1951, p. 204) Moors consider locusts a great delicacy and during
the summer of 1799 and the spring of 1800 when plague had almost depopulated Barbary, locusts
were served up at the principal repasts. This observer claims that roasted locusts taste like prawns
and that the Moors prefer them to pigeons. It is claimed further that a person may without ill effect
eat two or three hundred locusts at a time, but when obliged to live on them alone a condition of
emaciation and indolence followed.

In a special paper on locust-eating in far South Algeria, Kunckel D’Herculais reported that sixty
camel loads (9,000 kilo) of locusts were accumulated daily in the Ksours of the Oued-Souf and that the
stored supply of locusts per household amounted to about 200 kilo (Bodenheimer 1951, p. 205).
In Madagascar locusts are known as *valala* and constitute an important food (Bodenheimer 1951,
p. 199).

**North America**

Quoting Simmonds (1885, p. 366) Bodenheimer (1951, p. 284) states that in 1855 locusts devastated
Utah to such an extent that Europeans were compelled to subsist on these insects.
The consumption of Rocky Mountain locusts by certain North American tribes is reported by
Flaungh (1924, p. 6 vide Bodenheimer 1951, p. 283).

**South America**

Father Ovalle (vide Simmonds 1885, p. 357) observed in 1649 that in the absence of grain the
Indians of Chile prepared bread from locusts (Bodenheimer 1951, p. 309).

**Australia**

Locust-eating among the Aborigines of Queensland is reported by Lumholtz (1890, pp. 186, 240)
and Spencer and Gillen (1899, p. 771) observed that the Maras of the Gulf of Carpentaria used these
insects as food (Bodenheimer 1951, p. 133).

**China**

Quoting Cowan (1865, p. 126) Bodenheimer (1951, p. 273) states that the Chinese regard the locust when
derived from its abdomen and properly cooked as passable eating, but do not appear to hold the dish
in much estimation, while Nun Can Zinan Sciu asserts that the Chinese have eaten locusts since time
immemorial and that the people were advised to hunt them on a large scale to diminish their ravages.

**China**

According to Bodenheimer (1951, p. 273) the people in Peking are very fond of grasshoppers
cooked in sesame oil, the insects being collected by professional gatherers.

**Mexico**

Smith (1807, Vol. XII, p. 198) reported that the ancient Mexicans ate a large dark-coloured marsh
grasshopper known as *Atopan.*

**Middle East**

The inter-relations between Bedouin and locusts are described by their saying: “The locusts (*jarad*)
devour the Bedu, and the Bedu devours the locust.”
Bodenheimer (1951, p. 215) states that the delight shown by Arabs towards locusts as food is doubtless
essentially a reaction towards the attitude of a visitor and in support quotes Palgrave (1865, p. 138) as
follows: “When the locusts arrived in the Hofhof, I really thought they (the Arabs) would have gone
mad for joy, locusts are here an article of food, nay, a dainty, and a good swarm of them is begged of
Heaven in Arabia no less fervently than it would be deprecated in India or Syria.”

**Siam**

The Siamese like the Filipinos, eat grasshoppers fried in oil with salt. The insects are pounded into
a mass which is buried in the sand and left there for a considerable time, when the flavour is claimed to be somewhat similar to that of shrimps or anchovies.

WEST INDIES

In a report on the early days of occupation, Martyr (1612, p. 121) states that large baskets full of dried locusts were found in the houses of the inhabitants of these islands (Bodenheimer 1951, p. 25).

MANTIS (Orthoptera)

The praying mantis, *M. religiosa*, known to the Pedi as *serenapetlwane*, is greatly sought after by the herds. The insect is claimed to be very fat.

Instances of mantis-eating have been reported from China and Japan and the people of Laos eat both insects and eggs of a green species (*Hierodula*) (Bodenheimer 1951, pp. 269, 280).

MOTHs and BUTTERFLIES (Lepidoptera)

No instances of moth- or butterfly-eating could be traced among the Pedi and with the exception of the ghost-moth, *Tricerta argenteata* H.S., and the bugong-moth, *Euxoa* (*Agrostis*) *insula* Bois., both of Australia, relevant literature bears very little reference to this habit.

The bugong-moth of Australia, which derives its name from the Bugong mountains, congregates in masses during November, December and January on the granite outcrops of this mountain range. Bodenheimer (1951, p. 94) asserts that these moths with their high oil content played an important part in the dietary of the Aborigine; but though the moths are still in abundance, the native tribes which feasted on them have long ago moved to other areas.

PUPAE (Lepidoptera)

Repugnant as the idea of eating pupae may appear to the average European, they nevertheless figure prominently as delicacies in several diets.

The pupae of *Gonomea postica* Walk. constitute a most popular relish to the Pedi of the Northern Transvaal. A young English peer just out from England had the opportunity of displaying his emotions, when he visited one of the local chiefs and found his wife enjoying a plate of these roasted pupae.

The pupae of certain silk-producing *Byombyx* are widely eaten.

In Madagascar, the following pupae are eaten, *Borocera madagascarensis* Boisd., *Byombyx radama*, *Liberthia cajan* Vina., *Coenostegia diesgo* Mab., and *Debarea malagasi* Hy. An instance is quoted when in 1894 pupae were served at the table of the French Residence at Tananariva (Bodenheimer 1951, pp. 200-201).

In Indo-China the silkworm pupa (*Byombyx mori* L.) is a commercial foodstuff selling at 25 cents per kilo (approx. 2,500 pupae). The chrysalids are usually prepared by frying in fat and seasoning with lemon leaves or salt. What is claimed to be an excellent soup is prepared from these pupae and cabbage (Bodenheimer 1951, p. 267).

Silkworm pupae constitute a staple food in Burma, Malaya, China and Japan. Bodenheimer (1951, p. 275) reports that the people of Shantung cultivate a large chrysalid (*Anthera pernyi*) on oak trees. These pupae are highly prized and may serve as a special gift to friends and relatives.

The Piute Indians of California eat the pupae of the giant silkworm *Coloradia pandora* (Bodenheimer 1951, p. 292).

SCORPIONS (Arachnidae)

Although not true insects, scorpions are conveniently discussed with the *insecta*.

Scorpions evidently are of minor importance in entomophagy since very little reference is made to them in relevant literature.

In Siam, scorpions are attracted by whistling and all species are eaten (Bodenheimer 1951, p. 256).

The Pedi of the Northern Transvaal recognize the following three species of scorpions, none of which are eaten:

*Phepheng*. Small red species usually found in dead wood; very poisonous.

*Lesskiski*. Large black species, found under rocks, very popular food of baboons; very poisonous.

*Koseme*. Small dark-brown species; very poisonous.

SPIDERS (Araneidae)

Spiders are not true insects and are discussed with the *insecta* for purposes of convenience only.

Spiders, which are collectively known to the Pedi as *dikogoro*, are not eaten; but a certain trap-door species is used as medicine.

Eating of spiders, however, is not uncommon and to this effect Bodenheimer (1951, pp. 67-68) is quoted as follows:

"Apart from the spider-eating on New Caledonia which was reported by Labillardiere, and the few other notes on spiders, referring mainly to their use in mixed ragouts, especially in the monsoon regions, we wish to mention two additional reports. In Kamchatka spiders are rare, but they are eagerly sought for by sterile women, as their consumption is believed to bring fertility and to ease their labour (Krachcheninnikow 1764, p. 164). In Brazil certain spiders are believed to be strong aphrodisiacs (De Walckenar 1837, p. 182) and the same quality is ascribed to them in folk medicine throughout the world. Walckenar also tells the anecdote about the famous 18th century astronomer, De Lalande. After his return to France, every Saturday he visited
the naturalist, Quatemere D'Issonville, in his villa, and liked nothing more than to eat caterpillars and spiders when they were in season. In the garden Lalande easily found enough to satisfy his first hunger; but as Mme. D'Issonville liked to do everything well, she collected them in the afternoon and served them for Lalande immediately he arrived. The astronomer declared the spiders to taste like hazelnut, the caterpillars like stone-fruits.

"Roesel von Rosenhof (VI, p. 257) tells of a German who used to spread spiders instead of butter on his bread as a purgative. Shaw (vide Kirby and Spence I, p. 343) mentions how Anna Maria Schurmann used to eat spiders like nuts, to which she compared their taste.

"Reaumur (11, p. 342) mentions a young lady who, when she walked in her grounds, never saw a spider which she did not catch and eat on the spot. In certain regions of France the children hunt spiders for eating and compare their taste to that of nuts (Brygoo 1946, p. 19).

"Among primitive people the Bushmen consider spiders a delicacy (Sparmann vol. 3, p. 201). Cowan (1865, p. 354 f.) adds a number of further reports. Spiders are an article of food for American Indians and Australians (Labillardière). The people of Maniana, south of Gambie, are cannibals; they eat spiders, beetles and old men (Mollien). In Siam egg-bags of spiders are considered a delicacy (Turpin). The Caribbeans eat spiders, frogs and any kind of worms (Petrus Martyrus). The Guaharibos of the Orinoco and the Fiaroa Indians eat tarantulas (Wavrin). In Madagascar Epeira nigra Viss. and Nephila madagascarensis Viss. are fried in oil and fat (Decary). In various places spiders are eaten as an aphrodisiac."

**TERMITES (Isoptera)**

Apart from being one of the world's most destructive pests, termites which are often erroneously referred to as ants (Hymenoptera) constitute a universal primitive food.

**AFRICA**

In comparison with other edible insects lekêlé (termites) probably play a lesser role in Pedi dietary but they are nevertheless very popular and when available constitute a very nourishing contribution to the daily diet.

With reference to the distribution of termites in African dietary, Bodenheimer (1951, I, p. 144) quotes Bequaert as follows: "Throughout practically the whole of Tropical Africa termites are such an important addition to the regular diet of the natives that most travellers comment thereon."

Strangely enough, in Madagascar where many insects are used as food, termites, according to Decary as quoted by Bodenheimer (1951, p. 200) are used as chicken feed only.

**SOUTH AMERICA**

The large South American termite, Termes flavicoile Pty., known as capiria, is eaten by the natives of the Upper Amazon (Bodenheimer 1951, p. 305).

**AUSTRALIA**

The Australian Aborigine apparently does not share the African's zest for termites and normally eats them only when other foods become unavailable (Bodenheimer 1951, p. 133).

**BURMA**

Boiled or fried winged termites is a common dish in many places in Burma (Bodenheimer 1951, p. 269).

**INDIA**

Although not used as commonly as in Africa, termites constitute a popular food of many Hindu tribes. The queens, which are also eaten, are regarded as a potent aphrodisiac (Bodenheimer 1951, pp. 232-233).

**INDONESIA**

According to Leefmans (vide Bodenheimer 1951, p. 236) flying sexuals of termites larum, mainly Macrotermes sp., are used as food by the Javanese.

**SIAM**

In Laos flying termites are caught with light-traps surrounded by water. The insects attracted by the light have their wings singed and drop into the water from where they are collected. They are roasted with salt and have a vegetable flavour. The queens are relished as a delicacy (Bodenheimer 1951, p. 261).

**WASPS (Hymenoptera)**

The larvae of a certain wasp (mobo) as well as those of the honey bee (posi) are enjoyed by the Pedi, but are foods of minor importance.

In China and Japan wasp larvae are reputed to be very popular, and it is reported that in Japan the larvae of Vespa japonica are commercialized as a canned food product. The Siamese eat both adults and larvae of Vespa cineta F., whilst the larvae of wasps are a common food of certain North American Indian tribes (Bodenheimer 1951, pp. 277, 278, 262, 292).

The ancient and universal habit of entomophagy provokes the interest of the average European, but it is generally viewed with disgust. The fact, however, remains that insects have played, and still do play, a vital part in the dietary of many peoples; and the common prejudice against eating them is merely a matter of convention.
# EDIBLE INSECTS OF THE PEDI

## TABLE 16

<table>
<thead>
<tr>
<th>Pedi appellation</th>
<th>Identification</th>
<th>Edible stage</th>
<th>Food class</th>
<th>Chemical analysis</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unit weight</td>
</tr>
<tr>
<td>Kgakgaripane</td>
<td>Coleoptera</td>
<td>Adult weevil</td>
<td>Relish</td>
<td>(grams)</td>
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<tr>
<td></td>
<td>Polycelys planus Guer.</td>
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<td>0-2</td>
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<tr>
<td></td>
<td>Polycelys equestris Boh.</td>
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<td>2-6</td>
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<tr>
<td>Lebites-kgomo</td>
<td>Sternotercr orissa Buq.</td>
<td>Adult beetle</td>
<td></td>
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<tr>
<td>Diathlwa makhura</td>
<td>Hymenoptera</td>
<td>Flying sexual</td>
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<tr>
<td></td>
<td>Carebara vidua Sm. (female)</td>
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<tr>
<td></td>
<td>Carebara vidua Sm. (male)</td>
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<tr>
<td>Lekekê</td>
<td>Isoptera</td>
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<td>Termes badius</td>
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<tr>
<td>Legakgala</td>
<td>Lepidoptera</td>
<td>Larva</td>
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<tr>
<td></td>
<td>Gynandria mala Klug.</td>
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<tr>
<td>Mmakanokono</td>
<td>Gonometra postica Walk.</td>
<td>Pupa</td>
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<tr>
<td>Nautila</td>
<td>Herse convolvul L.</td>
<td>Larva</td>
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<tr>
<td>Ngwana Mamakhwehiwana</td>
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<td>Dist.</td>
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<tr>
<td>Ndlo</td>
<td>Notoidea</td>
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<td>3-8</td>
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<tr>
<td>Ntòlelešana</td>
<td>Cerina foria Westw.</td>
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<td>5-8</td>
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<tr>
<td></td>
<td>Conimbrasia belina Westw. (fresh)</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Conimbrasia belina Westw. (dehydrated)</td>
<td></td>
<td></td>
<td>2-03</td>
</tr>
<tr>
<td>Kodi</td>
<td>Orthoptera</td>
<td>All stages</td>
<td></td>
<td>0-5</td>
</tr>
<tr>
<td>Seongwane</td>
<td>Zoonegena elegans Thb.</td>
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<tr>
<td>Maphatla-palala</td>
<td>Locustana pardalina Walk.</td>
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</tr>
<tr>
<td></td>
<td>Nomanteris septemfasciata Serville</td>
<td>Serville</td>
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</tbody>
</table>
CHAPTER XXXV

MANYEUNYEU

In Pedi dietary the food category Manyeunyeu
includes the following relishes prepared from insects:

Var. 1. Sešebô sa dikgakgaripane
Var. 2. Sešebô sa mabitsi-kgomo
Var. 3. Sešebô sa dintlhma
Var. 4. Sešebô sa legakala
Var. 5. Sešebô sa nnakononono
Var. 6. Sešebô sa mašla
Var. 7. Sešebô sa ngwana-mamahwehlwana
Var. 8. Sešebô sa nôtlô
Var. 9. Sešebô sa nôtlôlešišana
Var. 10. Sešebô sa nôtlôlešišana ox masonja
Var. 11. Sešebô sa dikodí
Var. 12. Seholobe
Var. 13. Bokomé bja dišišë

In the preparation of these relishes, as described
subsequently, the following utensils were used:

Pitsana (small cooking pot)
Lehuduô (spatula)

SEŠEBÔ SA DIKGAKGARIPEKANE
(Variety 1)

DEFINITION
Relish prepared from fresh whole weevils
(Polyplectis aequastis Boh., see plate 91).

INGREDIENTS USED
Dressed, fresh weevils ... 4 oz. (387 weevils).
Water ... ... ... ... ... 10 oz.
Salt ... ... ... ... ... 7 g

PREPARATION PROCEDURE
Weevils dressed by removing elytra (outer
wings).
Weevils, water and salt added to cooking pot,
steved dry.
Stirred continually with spatula (lehuduô),
roasted crisp.
Cooking period recorded at 20 minutes.
Weight of prepared weevils ... ... ... ... 3 oz.
Weight of relish ration served ... ... ... ... 2 oz.

DESCRIPTION
Colour. Drab, black.
Texture. shell, crisp; interior, succulent, tender.
Flavour. Indistinct, salty-nutty.

General. Very popular with all members of Pedi
household, vies with meat as relish. Supply seasonal,
erratic; of lesser consequence in Pedi dietary.

APPROXIMATE NUTRITIVE VALUE OF RELISH RATION
Weight of relish ration ... ... ... ... 2.0 oz.
Weight of weevils per ration ... ... ... 2.6 
Crude protein (30.3%) per ration ... ... 22.3 g
Ether extract (2.2%) per ration ... ... ... 1.6 
Calories per ration ... ... ... ... ... 103.6

SEŠEBÔ SA MABITSI-KGOMO
(Variety 2)

DEFINITION
Relish prepared from fresh Buprestid beetles
(Sternerca orissa Buq., see plate 91).

INGREDIENTS USED
Dressed beetles ... ... ... ... ... 7 oz.
Water ... ... ... ... ... ... ... ... 8 oz.
Salt ... ... ... ... ... ... ... ... 7 g

PREPARATION PROCEDURE
Beetles dressed by removing elytra (outer
wings).
Beetles, water and salt added to cooking pot,
steved dry.
Stirred continually with spatula (lehuduô),
roasted crisp.
Cooking period recorded at 17 minutes.
Weight of prepared beetles ... ... ... ... 5 oz.
Weight of relish ration served ... ... ... ... 2 oz.

DESCRIPTION
Colour. Dull, black.
Texture. Shell, crisp, crunchy; interior juicy,
tender.
Flavour. Appetizing, fruity-meat.
General. Extremely popular with all members of
Pedi family; preferred to meat; supply seasonal,
scanty.

APPROXIMATE NUTRITIVE VALUE OF RELISH RATION
Weight of relish ration ... ... ... ... 2.0 oz.
Weight of beetles per ration ... ... ... 2.8 
Crude protein (21.4%) per ration ... 16.9 g
Ether extract (4.0%) per ration ... ... ... 3.2 
Calories per ration ... ... ... ... ... ... 96.4
Sešebô Sa Dintilhwa
(Variety 3)

Definition
Relish prepared from fresh female flying ants (Carebara vidua Sm., see plate 93).

Ingredients Used
Whole fresh flying ants .......... 11 oz.
Water ....... ......... ........ 3 oz.
Salt ....... ......... ........ 7 g

Preparation Procedure
Whole ants, water and salt added to cooking pot, stewed dry.
Stirred continuously with spatula (lehuudô), roasted crisp.
Cooking period recorded at 20 minutes.
Weight of prepared ants .......... 11 oz.
Weight of relish ration served .... 1 oz. (84 ants).

Description
Colour. Greenish-brown.
Texture. Shell, crisp; interior succulent, tender.
Flavour. Wild, meaty.
General. Very popular with all members of Pedi family. Supply seasonal, scanty.

Approximate Nutritive Value of Relish Ration
Weight of relish ration .......... 2.0 oz.
Weight of caterpillars per ration .... 5.0 g
Crude protein (8.3%) per ration .... 11.7 g
Ether extract (3.5%) per ration .... 5.0 g
Calories per ration ............ 91.8

Sešebô Sa Mmakonokono
(Variety 5)

Definition
Relish prepared from pupae of Gonometia postica Walk. (see plate 85).

Ingredients Used
Whole pupae .......... ........ 7 oz.
Water ....... ......... ........ 7 oz.
Salt ....... ......... ........ 7 g

Preparation Procedure
Whole pupae, water and salt added to cooking pot, stewed dry.
Stirred continuously with spatula (lehuudô), roasted crisp.
Cooking period recorded at 20 minutes.
Weight of prepared pupae .......... 5 oz.
Weight of relish ration served .... 1.5 oz. (24 pupae).

Sešebô Sa Legakgala
(Variety 4)

Definition
Relish prepared from fresh caterpillars (Gynanisa maia Klug., see plate 84).

Ingredients Used
Fresh dressed caterpillars .......... 5 oz.
Water ....... ......... ........ 7 oz.
Salt ....... ......... ........ 6 g

Preparation Procedure
Caterpillars gutted by squeezing between fingers.
Dressed caterpillars, water and salt added to cooking pot, stewed dry.
Stirred continuously with spatula (lehuudô), roasted crisp.
Cooking period recorded at 20 minutes.
Weight of prepared caterpillars .......... 2 oz.
Weight of relish ration served ....... 2 oz.

Description
Colour. Reddish-brown.
Texture. Shell, crisp; interior buttery, tender.
Flavour. Fatty, like marrow.
General. Extremely popular with all members of Pedi household; supply scanty.

Approximate Nutritive Value of Relish Ration
Weight of relish ration .......... 1.5 oz.
Weight of pupae per ration ....... 2.1 g
Crude protein (13.5%) per ration .... 8.0 g
Ether extract (13.2%) per ration .... 7.8 g
Calories per ration ............ 102.2

Sešebô Sa Naatla
(Variety 6)

Definition
Relish prepared from fresh caterpillars (Herse convolvuli L., see plate 84).
INGREDIENTS USED
Dressed, fresh caterpillars ... ... 6.5 oz.
Water ... ... ... ... ... ... ... ... ... ... ... 5.0 oz.
Salt ... ... ... ... ... ... ... ... ... ... ... ... 7.0 g

PREPARATION PROCEDURE
Caterpillars gutted by squeezing between fingers.
Dressed caterpillars, water and salt added to cooking pot, stewed dry.
Stirred continuously with spatula (lebududu), roasted crisp.
Cooking period recorded at 20 minutes.

Weight of prepared caterpillars ... ... 7 oz.
Weight of relish ration served ... ... 4 oz.

DESCRIPTION
Colour. Greenish-brown.
Texture. Shell, crisp; interior succulent, tender.
Flavour. Appetizing, meaty-vegetable, somewhat like asparagus.
General. Very popular with all members of Pedi family. Supply seasonal, sometimes abundant.

APPROXIMATE NUTRITIVE VALUE OF RELISH RATION
Weight of relish ration ... ... ... ... ... ... ... 4.0 oz.
Weight of caterpillars per ration ... ... ... ... ... 3.7 g
Crude protein (7.8%) per ration ... ... ... ... ... 8.2 g
Ether extract (4.4%) per ration ... ... ... ... ... 4.6 g
Calories per ration ... ... ... ... ... ... ... 74.2

SESEBΩ SA NGWANA-MAMAHLEKHUWANE
(Variety 7)

DEFINITION
Relish prepared from fresh caterpillars (Bombyx morima dist., see plate 84).

INGREDIENTS USED
Whole fresh caterpillars ... ... ... 13 oz.
Water ... ... ... ... ... ... ... ... ... ... ... 12 oz.
Salt ... ... ... ... ... ... ... ... ... ... ... 8 g

PREPARATION PROCEDURE
Whole caterpillars, salt and water added to cooking pot, stewed dry, not roasted.
Cooking period recorded at 20 minutes.

Weight of prepared caterpillars ... ... 9 oz.
Weight of relish ration served ... ... 4 oz.

DESCRIPTION
Colour. Black.
Texture. Hairy, succulent, tender.
Flavour. Meaty-sweet.
General. Most popular caterpillar relish. Supply available during winter, usually scanty.

APPROXIMATE NUTRITIVE VALUE OF RELISH RATION
Weight of relish ration ... ... ... ... ... ... ... 4.0 oz.
Weight of caterpillars per ration ... ... ... ... ... 5.8 g
Crude protein (10.5%) per ration ... ... ... ... 17.2 g
Ether extract (6.1%) per ration ... ... ... ... ... 10.0 g
Calories per ration ... ... ... ... ... ... ... ... 158.8

SESEBΩ SA NOTOLEDITSANA
(Variety 8)

DEFINITION
Relish prepared from fresh caterpillars (Cerina jorda Westw., see plate 84).

INGREDIENTS USED
Fresh whole caterpillars ... ... ... ... 8 oz.
Water ... ... ... ... ... ... ... ... ... ... ... 16 oz.
Salt ... ... ... ... ... ... ... ... ... ... ... ... 6 g

PREPARATION PROCEDURE
Whole caterpillars, water and salt added to cooking pot, stewed dry, not roasted.
Cooking period recorded at 35 minutes.

Weight of prepared caterpillars ... ... ... 5 oz.
Weight of relish ration served ... ... 4 oz

DESCRIPTION
Colour. reddish-brown.
Texture. Juicy, tender.
Flavour. Indistinct, meaty.

APPROXIMATE NUTRITIVE VALUE OF RELISH RATION
Weight of relish ration ... ... ... ... ... ... ... 4.0 oz.
Weight of caterpillars per ration ... ... ... ... ... 6.4 g
Crude protein (11.8%) per ration ... ... ... ... 21.4 g
Ether extract (5.7%) per ration ... ... ... ... ... 10.3 g
Calories per ration ... ... ... ... ... ... ... ... 178.3

SESEBΩ SA NOTOLELETSANA
(Variety 9)

DEFINITION
Relish prepared from fresh caterpillars (Conimbrasia belina Westw., see plate 86).

INGREDIENTS USED
Dressed caterpillars ... ... ... ... ... ... ... 16 oz.
Water ... ... ... ... ... ... ... ... ... ... ... 23 oz.
Salt ... ... ... ... ... ... ... ... ... ... ... ... 8 g

PREPARATION PROCEDURE
Caterpillars gutted by squeezing between fingers (see plate 8B). Dressed caterpillars, water and salt added to cooking pot; stewed dry.
Stirred continuously with spatula (lebududu), roasted crisp.

Weight of prepared caterpillars ... ... ... 14 oz.
Weight of relish ration served ... ... ... ... ... ... 4 oz.
(25 caterpillars).
**Manyunyeu**

**Description**
- **Colour**: Greenish-black.
- **Texture**: Shell, tough spiny; interior, succulent.
- **Flavour**: Meaty vegetable.

**General**: Extremely popular, preferred to meat, supply sometimes sufficiently abundant to warrant drying.

**Approximate Nutritive Value of Relish Ration**
- **Weight of relish ration**: 4.0 oz.
- **Weight of caterpillars per ration**: 4.6 "
- **Crude protein (10.4%) per ration**: 13.5 g.
- **Ether extract (3.3%) per ration**: 4.3 "
- **Calories per ration**: 92.7

**Sešebô Sa Nôtôlesëtsana or Masonia**
*(Variety 10)*

**Definition**
Relish prepared from cured caterpillars (*Conimbrasia belina* Westw., see plate 90).

**Ingredients Used**
- Cured caterpillars: 8 oz.
- Water: 38 oz.
- Salt: 6 g

**Preparation Procedure**
- Cured caterpillars and water added to cooking pot; stewed for 15 minutes.
- Salt added, stewed dry.
- Stirred continuously with spatula (*lehudûdê*), roasted crisp.
- Cooking period recorded at 45 minutes.

**Weight of prepared caterpillars**: 15 oz.
**Weight of relish ration served**: 3 oz. (28 caterpillars).

**Sešebô Sa Dikodi**
*(Variety 11)*

**Description**
- **Colour**: Brownish-black.
- **Texture**: Shell, crisp spiny; interior, tough rubbery.
- **Flavour**: Indistinct, meaty.

**General**: Extremely popular, preferred to fresh caterpillars.

**Approximate Nutritive Value of Relish Ration**
- **Weight of relish ration**: 3.0 oz.
- **Weight of caterpillars per ration**: 1.6 "
- **Crude protein (19.1%) per ration**: 8.6 g.
- **Ether extract (51.1%) per ration**: 23.1 "
- **Calories per ration**: 242.3

**Sešebô Sa Sehlôbe**
*(Variety 12)*

**Description**
Relish prepared from fresh Brown locusts (*Segongwane*) (*Locustana pardalina* Walk., see plate 92).

**Ingredients Used**
- Fresh, dressed locusts: 6 oz.
- Water: 4 oz.
- Salt: 4 g

**Preparation Procedure**
- Locusts dressed by stripping wings and hind legs; wings discarded, legs saved.
- Dressed locusts, water and salt added to cooking pot; stewed dry.
- Stirred continuously with spatula (*lehudûdê*), roasted crisp.
- Cooking period recorded at 20 minutes.

**Weight of prepared locusts**: 5 oz.
**Weight of relish ration served**: 3 oz.
**General.** Most popular of all relishes. Since eradication of this pest in Northern Transvaal, no longer of consequence in Pedi dietary. Red locust *Maphata-kalala* (Nomadacris septemfasciata) used similarly.

**Approximate Nutritive Value of Meal Ration**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of relish ration</td>
<td>3.0 oz</td>
</tr>
<tr>
<td>Weight of hoppers per ration</td>
<td>3.6</td>
</tr>
<tr>
<td>Crude protein (18.2%) per ration</td>
<td>18.5 g</td>
</tr>
<tr>
<td>Ether extract (21.5%) per ration</td>
<td>21.9</td>
</tr>
<tr>
<td>Calories per ration</td>
<td>271.1</td>
</tr>
</tbody>
</table>

**Bokomê Bja Ditši (Variety 13)**

**Definition**
Relish prepared from the hind legs of Brown locusts, *Segongwane* (Locustana pardalina Walk.).

**Ingredients Used**
- Cured hind legs ... ... ... 8 g
- Salt ... ... ... ... ... 1 g

**Preparation Procedure**
Hind legs stewed in water and dried, or collected after locusts had been dried for storage.
Legs and salt ground into meal on grinding stone (see plate 127).

**Description**
- *Colour.* Reddish-brown.
- *Texture.* Dry, mealy; similar to grated biltong.
- *Flavour.* Appetizing, meaty.

**General.** Very popular; relish concentrate, served in small portions; also used as food-concentrate when travelling.

**Approximate Nutritive Value of Relish Ration**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of relish ration</td>
<td>8.0 g</td>
</tr>
<tr>
<td>Weight of legs per ration</td>
<td>8.0 g</td>
</tr>
<tr>
<td>Crude protein (55.5%) per ration</td>
<td>4.4</td>
</tr>
<tr>
<td>Ether extract (3.4%) per ration</td>
<td>0.3</td>
</tr>
<tr>
<td>Calories per ration</td>
<td>20.3</td>
</tr>
</tbody>
</table>

**Serving Procedure**
The insect food dishes of the Pedi are served invariably as a relish with their cereal meal porridges, *Bogôbê bja nábélétêhôrô* (kafir-corn meal porridge), *Bogôbê bja leotša* (kafir-millet meal porridge) and *Bogôbê bja lefela* (mealie meal porridge). The smaller insects, like ants and weevils, are relished whole with a lump of porridge, while the larger caterpillars and locusts are eaten bit by bit with the porridge.

**Dietary Role**
Apart from the food value of these insect relishes, their popularity alone warrants their classification as valuable food.

Unfortunately the supply of edible insects is entirely seasonal, fluctuating widely with rainfall. Furthermore, one of the most valuable and certainly the most popular food insect, viz. the locust, has in latter years been completely eradicated in the Sekukhuneland area. Also, with the increase in cultivated areas and the resultant decrease in natural vegetation, the edible insect incidence has been greatly reduced in this area. Nevertheless, insects still play some part in Pedi dietary, especially in that of the herds.

**Summary and Discussion**
The characteristics of the insect relishes of the Pedi are summarized in table 41.

Although entomography is generally uncommon among Europeans, it is widely practised by primitive peoples.

European prejudice against insects as food is largely a matter of convention, since, revolting as a plate of grilled, fat, hairy caterpillars may appear, aesthetically there can hardly be any difference between this dish and a plate of oysters; while from a purely nutritional point of view the former may be superior.

In sampling the various insect relishes of the Pedi, it was endeavoured to assume a completely objective attitude; but it is reluctantly admitted that, despite all efforts, each test was followed by a violent bout of retching—so much for convention.

With the exception of a subtle "wild" flavour, no distinctive or agreeable taste could be discerned in these relishes, although such qualities are emphatically claimed by the Pedi, who actually prefer these relishes to meat.

The dish prepared of Elegant grasshoppers (*dikodi*) is characterized by a bitter astringent flavour which, as with certain leaf relishes, is greatly sought after.

The insect relishes of the Pedi constitute a valuable source of protein and fat, and compare with certain meats as follows:
The food insects of the Pedi are virtually pests and to advocate their protection is thus impractical; and the only feasible way of meeting the demand for this class of insects is to organize and expand the masonja industry—not only in the Northern Transvaal, but possibly in the adjoining territories of Bechuanaaland and Southern Rhodesia. This valuable food supply is still haphazardly and wastefully exploited. Thus when guttering the caterpillars a large proportion of fat is lost with their guts, which are removed primarily to eliminate the resin flavoured mopanie (Copaeæa mopane) leaves ingested. This loss of fat and the operation of guttering may possibly be eliminated by starving the collected caterpillars in an enclosure for an hour or so, and curing them whole. Furthermore, the cured product, when stored for any length of time, should be protected against the “skin and horn” beetles Dermestes vulpinus Fabr. and Dermestes tarsarius L., which attack it readily.

### Table 41

**CHARACTERISTICS OF THE INSECT RELISHES OF THE PEDI**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Identification of Insect</th>
<th>Stage used</th>
<th>Weight of relish ration oz.</th>
<th>Calories per relish ration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sebēbā sa dikgakgaripane</td>
<td>Polylecis equestris Boh.</td>
<td>Adult weevil</td>
<td>2-0 oz.</td>
<td>103-6</td>
<td>Very popular; vies with meat</td>
</tr>
<tr>
<td>Sebēbā sa mabatsi-komo</td>
<td>Sternocera orissa Buq.</td>
<td>Adult beetle</td>
<td>2-0 oz.</td>
<td>96-4</td>
<td>Extremely popular; preferred to meat</td>
</tr>
<tr>
<td>Sebēbā sa dithlwa</td>
<td>Carebara vidua Sm.</td>
<td>Flying sexual</td>
<td>1-0 oz.</td>
<td>68-0</td>
<td>Extremely popular; preferred to meat</td>
</tr>
<tr>
<td>Sebēbā sa legakgala</td>
<td>Gynnita maia Klug.</td>
<td>Caterpillar</td>
<td>2-0 oz.</td>
<td>91-8</td>
<td>Very popular</td>
</tr>
<tr>
<td>Sebēbā sa makanokano</td>
<td>Gonometa postica Walk.</td>
<td>Pupa</td>
<td>1-5 oz.</td>
<td>102-2</td>
<td>Extremely popular; preferred to meat</td>
</tr>
<tr>
<td>Sebēbā sa naqala</td>
<td>Herse convolvuli L.</td>
<td>Caterpillar</td>
<td>4-0 oz.</td>
<td>74-2</td>
<td>Very popular</td>
</tr>
<tr>
<td>Sebēbā sa ngwana-</td>
<td>Bombyx mori pha palea</td>
<td>Dist.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>158-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sebēbā sa nōtō</td>
<td>Cerina forda West.</td>
<td>Caterpillar</td>
<td>4-0 oz.</td>
<td>178-3</td>
<td>Extremely popular</td>
</tr>
<tr>
<td>Sebēbā sa nōtōtlelasana</td>
<td>Conimbrasia belina West.</td>
<td>Caterpillar</td>
<td>4-0 oz.</td>
<td>92-7</td>
<td>Extremely popular; preferred to meat</td>
</tr>
<tr>
<td>Sebēbā sa nōtōtlelasana or masonja</td>
<td>Conimbrasia belina Westw.</td>
<td>Cured caterpillar</td>
<td>3-0 oz.</td>
<td>242-3</td>
<td>Extremely popular; preferred to fresh article</td>
</tr>
<tr>
<td>Sebēbā sa dikoti</td>
<td>Zonocerus ebooks Thbh.</td>
<td>Hopper</td>
<td>1-5 oz.</td>
<td>57-7</td>
<td>Popular</td>
</tr>
<tr>
<td>Sebēbē</td>
<td>Locustana pardulina Walk.</td>
<td>Flier</td>
<td>3-0 oz.</td>
<td>274-1</td>
<td>Most popular of all relishes</td>
</tr>
<tr>
<td>Bokonē ṣe ḋiṭišē</td>
<td>Locustana pardulina Walk.</td>
<td>Hind legs</td>
<td>0-3 oz.</td>
<td>20-3</td>
<td>Very popular; relish concentrate</td>
</tr>
</tbody>
</table>
CHAPTER XLI

MODERN TENDENCIES IN AFRICAN DIETARY

With the object of casting some light on the effect of modern influences on the dietary of Africans employed on the Zebediela Estates, a daily survey throughout a year was conducted in nine different households.

Households of which the respective heads were capable of answering a daily questionnaire were selected.

The details collected from these questionnaires are summarized for the respective households as follows:

Dietary Survey

Survey No. 1

Name of collaborator: Ben Maja.
Tribal kinship: Pedi.
Occupation: Estates Induna (Headman).
Tribal kinship of wife: Pedi (Lena, see plate 17).
Period of survey: 262 days (year 1950).

<table>
<thead>
<tr>
<th>Meal</th>
<th>Constituents of meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td>MORNING MEAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No nourishment</td>
<td></td>
<td>10</td>
<td>3·8</td>
</tr>
<tr>
<td>Fermented gruel (motégo)</td>
<td></td>
<td>73</td>
<td>27·9</td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td>82</td>
<td>31·3</td>
</tr>
<tr>
<td>Tea and bread</td>
<td></td>
<td>47</td>
<td>17·9</td>
</tr>
<tr>
<td>Tea, bread and jam</td>
<td></td>
<td>3</td>
<td>1·1</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>2</td>
<td>0·8</td>
</tr>
<tr>
<td>Porridge and spinach (motégo)</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>15</td>
<td>5·7</td>
</tr>
<tr>
<td>Porridge (thin—motépa)</td>
<td></td>
<td>18</td>
<td>6·9</td>
</tr>
<tr>
<td>Porridge (thin—motépa) and milk</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge, bread and meat</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge and tea</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Tea, bread and meat</td>
<td></td>
<td>3</td>
<td>1·1</td>
</tr>
<tr>
<td>Noon Meal</td>
<td></td>
<td>23</td>
<td>8·8</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>205</td>
<td>78·2</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>6</td>
<td>2·3</td>
</tr>
<tr>
<td>Porridge</td>
<td></td>
<td>8</td>
<td>3·0</td>
</tr>
<tr>
<td>Porridge and spinach (motégo)</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge, meat and bread</td>
<td></td>
<td>2</td>
<td>0·8</td>
</tr>
<tr>
<td>Porridge and caterpillars</td>
<td></td>
<td>8</td>
<td>3·0</td>
</tr>
<tr>
<td>Porridge and fish</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge (thin—motépa)</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Fermented gruel (motégo)</td>
<td></td>
<td>4</td>
<td>1·5</td>
</tr>
<tr>
<td>Bread and meat</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Biscuits</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Beer</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
</tbody>
</table>

Evening Meal

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No nourishment</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>141</td>
<td>53·8</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>18</td>
<td>6·9</td>
</tr>
<tr>
<td>Porridge and spinach (motégo)</td>
<td></td>
<td>44</td>
<td>16·8</td>
</tr>
<tr>
<td>Porridge and potatoes</td>
<td></td>
<td>2</td>
<td>0·8</td>
</tr>
<tr>
<td>Porridge and fish</td>
<td></td>
<td>14</td>
<td>5·3</td>
</tr>
<tr>
<td>Porridge and bread</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge, meat and potatoes</td>
<td></td>
<td>3</td>
<td>1·1</td>
</tr>
<tr>
<td>Porridge and caterpillars</td>
<td></td>
<td>23</td>
<td>8·7</td>
</tr>
<tr>
<td>Porridge</td>
<td></td>
<td>3</td>
<td>1·1</td>
</tr>
<tr>
<td>Porridge and sugar</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge and gravy</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge (thin—motépa)</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Porridge, meat, bread and tea</td>
<td></td>
<td>4</td>
<td>1·5</td>
</tr>
<tr>
<td>Porridge, meat, potatoes and tea</td>
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<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Spinach, bread and tea</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Fermented gruel (motégo)</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Bread and meat</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
<tr>
<td>Pumpkin, cabbage and rice</td>
<td></td>
<td>1</td>
<td>0·4</td>
</tr>
</tbody>
</table>

After Supper, before Retiring

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No nourishment</td>
<td></td>
<td>177</td>
<td>67·6</td>
</tr>
<tr>
<td>Fermented gruel (motégo)</td>
<td></td>
<td>48</td>
<td>18·3</td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td>33</td>
<td>12·6</td>
</tr>
</tbody>
</table>

Dietary Survey

Survey No. 2

Name of collaborator: Davis Moyambo.
Tribal kinship: Ndebele (Southern Rhodesia).
Occupation: Clerk.
Tribal kinship of wife: Ndebele (Potgietersrust).
Period of survey: 268 days (year 1950).

<table>
<thead>
<tr>
<th>Meal</th>
<th>Constituents of meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td>MORNING MEAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No nourishment</td>
<td></td>
<td>70</td>
<td>26·1</td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td>178</td>
<td>66·4</td>
</tr>
<tr>
<td>Tea and biscuits</td>
<td></td>
<td>3</td>
<td>1·1</td>
</tr>
<tr>
<td>Tea and bread</td>
<td></td>
<td>6</td>
<td>2·2</td>
</tr>
<tr>
<td>Coffee</td>
<td></td>
<td>9</td>
<td>3·4</td>
</tr>
<tr>
<td>Coffee and bread</td>
<td></td>
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<td>0·4</td>
</tr>
<tr>
<td>Cocoa</td>
<td></td>
<td>1</td>
<td>0·4</td>
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</table>

Noon Meal

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>256</td>
<td>95·6</td>
</tr>
<tr>
<td>Porridge and spinach (motégo)</td>
<td></td>
<td>4</td>
<td>1·5</td>
</tr>
<tr>
<td>Porridge and fish</td>
<td></td>
<td>2</td>
<td>0·7</td>
</tr>
<tr>
<td>Porridge and caterpillars</td>
<td></td>
<td>6</td>
<td>2·2</td>
</tr>
</tbody>
</table>

262
### MODERN TENDENCIES IN AFRICAN DIETARY

#### EVENING MEAL
- Porridge and meat: 247, 92.2%
- Porridge and spinach (morogó): 7, 2.6%
- Porridge and fish: 5, 1.9%
- Porridge and caterpillars: 8, 2.9%
- Porridge and bacon: 1, 0.4%

#### AFTER SUPPER, BEFORE RETIRING
- Nil: 240, 89.6%
- Beer: 15, 5.6%
- Fermented gruel (morogó): 13, 4.8%

---

#### DIETARY SURVEY

**Survey No. 3**

*Name of collaborator: Harry Maja.*

*Tribal kinship: Pedi.*

*Occupation: Clerk.*

*Tribal kinship of wife: Pedi.*

*Period of survey: 275 days (year 1950).*

<table>
<thead>
<tr>
<th>Meal</th>
<th>Constituents of meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MORNING MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No nourishment</td>
<td></td>
<td>143</td>
<td>52.0%</td>
</tr>
<tr>
<td>Fermented gruel (morogó)</td>
<td></td>
<td>31</td>
<td>11.3%</td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td>55</td>
<td>20.0%</td>
</tr>
<tr>
<td>Tea and bread</td>
<td></td>
<td>16</td>
<td>5.8%</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>30</td>
<td>10.9%</td>
</tr>
<tr>
<td><strong>NOON MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porridge</td>
<td></td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>260</td>
<td>94.5%</td>
</tr>
<tr>
<td>Porridge and spinach (morogó)</td>
<td></td>
<td>6</td>
<td>2.1%</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>3</td>
<td>1.1%</td>
</tr>
<tr>
<td>Porridge and fish</td>
<td></td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>Porridge (thin—morogó)</td>
<td></td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>Fermented gruel (morogó)</td>
<td></td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td><strong>EVENING MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porridge</td>
<td></td>
<td>1</td>
<td>0.36%</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>79</td>
<td>28.73%</td>
</tr>
<tr>
<td>Porridge and spinach (morogó)</td>
<td></td>
<td>124</td>
<td>45.09%</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>34</td>
<td>12.37%</td>
</tr>
<tr>
<td>Porridge and fish</td>
<td></td>
<td>1</td>
<td>0.36%</td>
</tr>
<tr>
<td>Porridge (vegetable) kepapi</td>
<td></td>
<td>6</td>
<td>2.18%</td>
</tr>
<tr>
<td>Porridge (thin) motepa</td>
<td></td>
<td>1</td>
<td>0.36%</td>
</tr>
<tr>
<td>Porridge, meat and bread</td>
<td></td>
<td>1</td>
<td>0.36%</td>
</tr>
<tr>
<td>Stewed grain (lemwa)</td>
<td></td>
<td>20</td>
<td>7.27%</td>
</tr>
<tr>
<td>Bean porridge (sekgethó)</td>
<td></td>
<td>4</td>
<td>1.46%</td>
</tr>
<tr>
<td>Bread and tea</td>
<td></td>
<td>2</td>
<td>0.73%</td>
</tr>
<tr>
<td>Potatoes</td>
<td></td>
<td>2</td>
<td>0.73%</td>
</tr>
<tr>
<td><strong>AFTER SUPPER, BEFORE RETIRING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No nourishment</td>
<td></td>
<td>192</td>
<td>70.0%</td>
</tr>
<tr>
<td>Fermented gruel (morogó)</td>
<td></td>
<td>75</td>
<td>27.20%</td>
</tr>
<tr>
<td>Marula beer</td>
<td></td>
<td>8</td>
<td>2.80%</td>
</tr>
</tbody>
</table>

---

#### DIETARY SURVEY

**Survey No. 4**

*Name of collaborator: Patrick Maja.*

*Tribal kinship: Pedi.*

*Occupation: Clerk.*

*Tribal kinship of wife: Sotho (Pretoria).*

*Period of survey: 267 days (year 1950).*

---

#### MEAL OCCURRENCE AND PERCENTAGE

<table>
<thead>
<tr>
<th>Meal</th>
<th>Constituents of meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MORNING MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No nourishment</td>
<td></td>
<td>178</td>
<td>67.7%</td>
</tr>
<tr>
<td>Fermented gruel (morogó)</td>
<td></td>
<td>39</td>
<td>14.5%</td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>Tea and bread</td>
<td></td>
<td>5</td>
<td>1.9%</td>
</tr>
<tr>
<td>Coffee</td>
<td></td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>Coffee and bread</td>
<td></td>
<td>29</td>
<td>10.9%</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>6</td>
<td>2.2%</td>
</tr>
<tr>
<td>Porridge, meat and morogó</td>
<td></td>
<td>4</td>
<td>1.4%</td>
</tr>
<tr>
<td>Porridge, meat and coffee</td>
<td></td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Porridge, meat and tea</td>
<td></td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td><strong>NOON MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porridge and meat</td>
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<td>228</td>
<td>85.4%</td>
</tr>
<tr>
<td>Porridge and spinach (morogó)</td>
<td></td>
<td>12</td>
<td>4.6%</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>5</td>
<td>1.9%</td>
</tr>
<tr>
<td>Porridge and fish</td>
<td></td>
<td>18</td>
<td>6.7%</td>
</tr>
<tr>
<td>Porridge and eggs</td>
<td></td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Porridge and potatoes</td>
<td></td>
<td>3</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>EVENING MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>190</td>
<td>72.5%</td>
</tr>
<tr>
<td>Porridge and spinach (morogó)</td>
<td></td>
<td>51</td>
<td>19.1%</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>12</td>
<td>4.6%</td>
</tr>
<tr>
<td>Porridge and fish</td>
<td></td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>Porridge and caterpillars</td>
<td></td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Porridge, meat and tea</td>
<td></td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Stewed grain (lemwa)</td>
<td></td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>Potatoes</td>
<td></td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Bread and tea</td>
<td></td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td><strong>AFTER SUPPER, BEFORE RETIRING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No nourishment</td>
<td></td>
<td>160</td>
<td>59.9%</td>
</tr>
<tr>
<td>Fermented gruel (morogó)</td>
<td></td>
<td>61</td>
<td>22.8%</td>
</tr>
<tr>
<td>Beer</td>
<td></td>
<td>40</td>
<td>15.0%</td>
</tr>
<tr>
<td>Marula beer</td>
<td></td>
<td>6</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

---

#### DIETARY SURVEY

**Survey No. 5**

*Name of collaborator: Franz Masetla.*

*Tribal kinship: Ndebele (Zebediela).*

*Occupation: Clerk.*

*Tribal kinship of wife: Ndebele (Zebediela).*

*Duration of survey: 272 days (year 1950).*

<table>
<thead>
<tr>
<th>Meal</th>
<th>Constituents of meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MORNING MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No nourishment</td>
<td></td>
<td>206</td>
<td>75.8%</td>
</tr>
<tr>
<td>Fermented gruel (morogó)</td>
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<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td>52</td>
<td>19.1%</td>
</tr>
<tr>
<td>Tea and scones</td>
<td></td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Tea and bread</td>
<td></td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>Tea and biscuits</td>
<td></td>
<td>9</td>
<td>3.3%</td>
</tr>
<tr>
<td><strong>NOON MEAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porridge and meat</td>
<td></td>
<td>104</td>
<td>38.2%</td>
</tr>
<tr>
<td>Porridge and spinach (morogó)</td>
<td></td>
<td>135</td>
<td>49.6%</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td></td>
<td>17</td>
<td>6.3%</td>
</tr>
<tr>
<td>Porridge and caterpillars</td>
<td></td>
<td>15</td>
<td>5.5%</td>
</tr>
<tr>
<td>Porridge, meat and potatoes</td>
<td></td>
<td>1</td>
<td>0.4%</td>
</tr>
</tbody>
</table>
### Evening Meal

<table>
<thead>
<tr>
<th>Meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porridge and meat</td>
<td>129</td>
<td>47.4</td>
</tr>
<tr>
<td>Porridge and spinach (mbobô)</td>
<td>89</td>
<td>32.7</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td>17</td>
<td>6.3</td>
</tr>
<tr>
<td>Porridge and eggs</td>
<td>6</td>
<td>2.2</td>
</tr>
<tr>
<td>Porridge and caterpillars</td>
<td>22</td>
<td>8.1</td>
</tr>
<tr>
<td>Porridge, meat and tomatoes</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Stewed grain (fela)</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>Bread and tea</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Potatoes and meat</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

### After Supper, Before Retiring

<table>
<thead>
<tr>
<th>Meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td>No nourishment</td>
<td>101</td>
<td>37.1</td>
</tr>
<tr>
<td>Fermented gruel (motôgô)</td>
<td>133</td>
<td>48.9</td>
</tr>
<tr>
<td>Beer</td>
<td>38</td>
<td>14.0</td>
</tr>
</tbody>
</table>

### Dietary Survey

**Survey No. 6**

*Name of collaborator:* Isiah Maksatho.

*Tribe and sub-tribe:* Pedi.

*Occupation:* Clerk.

*Tribe and sub-tribe of wife:* Ndebele (Zebediela).

*Duration of survey:* 264 days (year 1950).

### Morning Meal

<table>
<thead>
<tr>
<th>Meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td>No nourishment</td>
<td>180</td>
<td>68.2</td>
</tr>
<tr>
<td>Fermented gruel (motôgô)</td>
<td>59</td>
<td>22.3</td>
</tr>
<tr>
<td>Fermented gruel and tea</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Tea and bread</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>Tea and cakes</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Tea and native bread (dinkgwa)</td>
<td>9</td>
<td>3.4</td>
</tr>
<tr>
<td>Bread</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

### Noon Meal

<table>
<thead>
<tr>
<th>Meal</th>
<th>Occurrence during survey</th>
<th>Percentage of total feeding days</th>
</tr>
</thead>
<tbody>
<tr>
<td>No nourishment</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Porridge and meat</td>
<td>151</td>
<td>57.1</td>
</tr>
<tr>
<td>Porridge and milk</td>
<td>15</td>
<td>5.6</td>
</tr>
<tr>
<td>Porridge and spinach (mbô)</td>
<td>72</td>
<td>27.2</td>
</tr>
<tr>
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<tr>
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<td>Porridge and pumpkin seeds</td>
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<tr>
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</tr>
<tr>
<td>Fermented gruel (motôgô)</td>
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### Evening Meal

<table>
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<tr>
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<th>Percentage of total feeding days</th>
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<td>Porridge and pumpkin</td>
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</tr>
<tr>
<td>Porridge and eggs</td>
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<td>0.4</td>
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<tr>
<td>Porridge, meat and tea</td>
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<tr>
<td>Porridge, meat and biscuits</td>
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### After Supper, Before Retiring

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<td>Tea</td>
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<td>1.9</td>
</tr>
<tr>
<td>Tea and bread</td>
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<td>0.4</td>
</tr>
<tr>
<td>Tea and cakes</td>
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</tr>
<tr>
<td>Tea and native bread (dinkgwa)</td>
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### Dietary Survey

**Survey No. 7**

*Name of collaborator:* Zeblon Manda.

*Tribe and sub-tribe:* Tonga (Rhodesia).

*Occupation:* Clerk.

*Tribe and sub-tribe of wife:* No wife responsible for cooking.

*Duration of survey:* 276 days (year 1950).

### Morning Meal

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<td>Porridge and beans</td>
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<tr>
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<td>0.4</td>
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### Evening Meal

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<td>Porridge and tomatoes</td>
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### Dietary Survey

**Survey No. 9**

*Name of collaborator: Peter Maleka.*
*Tribal kinship: Sotho (Pietersburg).*
*Occupation: Clerk.*
*Tribal kinship of wife: Sotho (Pietersburg).*
*Period of survey: 277 days (year 1950).*

<table>
<thead>
<tr>
<th>Meal</th>
<th>Constituents of meal</th>
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### Dietary Survey

**Survey No. 9**

*Name of collaborator: Kennard Mbita.*
*Tribal kinship: Ngoni (Nyasaland).*
*Occupation: Senior clerk.*
*Tribal kinship of wife: Not married, did own cooking.*
*Period of survey: 265 days (year 1950).*

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<td>3</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Porridge, meat and potatoes</td>
<td>5</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Porridge, beans and spinach (morogdo)</td>
<td>1</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Porridge, meat and morogdo</td>
<td>2</td>
<td>0.7</td>
<td></td>
</tr>
</tbody>
</table>
Porridge, spinach and tomatoes 1 0·4
Porridge, meat and tomatoes 1 0·4
Porridge, meat, tea and scones 1 0·4
Porridge, meat, pumpkin, scones and bread 1 0·4
Porridge, meat and beans 12 0·4
Bread and meat 35 12·2
Bread and pumpkin 1 0·4
Bread, meat and tomatoes 2 0·7
Bread, meat, pumpkin and green mealies 2 0·7
Bread, meat and potatoes 2 0·7
Bread, green mealies and tea 1 0·4
Bread and beans 1 0·4
Potatoes and meat 54 20·4
Potatoes and rice 2 0·7
Potatoes, bread and tea 2 0·7
Potatoes and tea 10 3·8
Potatoes and pumpkin 2 0·7
Potatoes and beans 3 1·1
Rice and meat 3 1·1
Beans, meat and cabbage 1 0·4
Pumpkin 14 5·3
Pumpkin and green mealies 2 0·8
Pumpkin and tea 2 0·7
Fermented gruel 1 0·4

After Supper, before retiring
No nourishment 14 5·3
Tea 148 55·8
Tea and beer 24 9·1
Tea and fermented gruel 34 12·8
Beer 13 4·9
Fermented gruel 32 12·1

Summary and Discussion

The results of the dietary surveys are summarized in table 45.

Shopping facilities are provided for all the employees of the Zebediela Estates, through the medium of a co-operative store and butchery conducted on a non-profit basis; and the results of the food survey are discussed in conjunction with the food-buying habits of the African as observed in the said organizations, under the following headings:

Beverages (non-alcoholic)
Beverages (alcoholic)
Cereal meal porridges
Wheat products
Meat and fat
Fish
Eggs
Milk and milk products
Sugar and sugar products
Vegetables (cultivated and indigenous)
Feeding pattern

Beverages (Non-intoxicating)

Fermented Cereal Gruel (Motògo). The survey reveals that fermented gruel is still of common occurrence in the dietary of the local African community, but there is also evidence to indicate that with a certain section of the population, tea, a much more expensive and recently introduced beverage, is rapidly replacing the traditional one. This is to be deplored, since apart from the economic aspect, there is no comparison in nutritive value between these two beverages.

Coffee. Trade observations, corroborated by the food surveys, indicate that the local African community uses a certain amount of coffee, but the demand is neither significant nor general.

Tea. All available evidence tends to indicate that the local African is rapidly becoming a tea drinker, and despite its high ruling price, there is a keen and general demand for this article.

The total incidence of tea during the period surveyed compares with that of other beverages as follows:

<table>
<thead>
<tr>
<th>Beverage</th>
<th>Number of times recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea</td>
<td>1,125</td>
</tr>
<tr>
<td>Fermented gruel</td>
<td>759</td>
</tr>
<tr>
<td>Coffee</td>
<td>108</td>
</tr>
</tbody>
</table>

The increasing popularity of tea among the Pedi is ascribed to the following reasons:

1. Tea is effectively advertised by the trade, through medium of travelling shows.

2. As indicated previously, the Pedi is partial to a wry tannin taste, such as that of tea.

3. Whereas the preparation of fermented gruel takes at least 12 hours, tea can be prepared in a few minutes.

4. To serve tea is regarded as a criterion of sophistication, thus adding to a person's social prestige.

Mineral Waters

The local African is very fond of aerated mineral water including Coca-Cola; and a very popular snack is a bottle of lemonade and a raisin bun.

Beverages (Alcoholic)

It was perhaps unfair to expect a man to keep a tally of his drinks and for this reason the incidence of beer as reflected in the survey may be regarded as conservative.

There are quite a number of total abstainers in the community, but the majority of men still love their kaffir-beer, and contrary to tradition even some of the women enjoy it.

Brewing the traditional beer is encouraged within limits, but despite this concession there is still a demand for the illegal poisonous concoctions as well as the White man's drinks.

Cereal Meal Porridges

The survey reveals that cereal meal porridge together with meat constitutes virtually the entire dietary of the local African. This is largely due to the fact that both mealie meal and meat are supplied as free rations. It is submitted, however, that, even if supplies had to be bought, mealie meal would still form the basis of their dietary.
As indicated previously (see chapter X) the African has developed a predilection for refined white mealie meal, and this also applies to the local community. However, when white meal is supplied freshly ground and of the desired fineness, the prejudice against it disappears.

The traditional kaifir-corn (A. sorghum) and kaifir-millet (P. speicatum) meals are being introduced into the local dietary. Millet meal is acceptable at infrequent intervals only, but that of kaifir-corn—provided the correct variety is used—is very popular.

WHEATEN PRODUCTS

Bread. The survey reveals that bread is of fairly common occurrence in local dietary. Observations indicate that, as with mealie meal, preference is given to the white refined article, which is commonly used, not as food, but in the concoction of potent liquors. Fortunately, however, a marked tendency is developing towards the fortified whole-meal loaf ("Bremer bread").

The local African housewife is not yet conversant with the baking of bread and all supplies are still bought.

Biscuits, Buns, etc. Observations indicate a fairly regular, although not big demand for the cheaper brands of biscuits; and as mentioned previously, a sweet bun and a bottle of lemonade constitute a very popular snack.

MEAT AND FAT

Meat (fresh). The very high incidence of meat in local dietary—as indicated by the survey—is largely due to the fact that African employees receive a ration of meat, free, four times per week. Additional supplies available at 9d. per lb. are bought regularly from the Co-operative butchery.

Meat (canned). Although canned meat (billy beef) is accepted readily, the demand is limited because of the cheapness of fresh meat.

Fat. Observations indicate that fat plays an insignificant rôle in the dietary of the local African, because the demand for this foodstuff is negligible despite the fact that it is available at 1/- per lb.

FISH

As indicated previously, Pedi tradition forbids fish as food; but there is a tendency nowadays to accept it as such, especially the article canned in tomato sauce.

EGGS

Despite the fact that the majority of the collaborators in the food survey owned fowls, eggs seldom occurred in the dietary. The reason for this is that an egg is regarded as a potential fowl, which is of far greater food value.

MILK AND MILK PRODUCTS

Milk. The relatively low incidence of milk, as indicated by the survey, is no criterion of its popularity. It is still regarded as a very desirable food and its restricted consumption is due entirely to shortage of supplies.

Condensed milk, which is used exclusively in tea and coffee, is bought regularly.

Butter and Cheese. As in the traditional dietary, butter and cheese have not yet appeared in that of the modern local Pedi, this observation applying to other local tribes too.

SUGAR AND SUGAR PRODUCTS

Sugar. According to the survey, the use of sugar as a relish was recorded in one instance only. Trade observations, however, indicate an extensive demand for unrefined sugar, which unfortunately is used largely in concocting alcoholic beverages. There is a limited demand for the refined white article which is used exclusively in tea.

Jams and Syrups. There is a very limited demand for the cheaper grades of jam which, as is indicated by the survey, are seldom used. There is, however, a much greater demand for Golden Syrup.

Sweets. The cheaper lines of sweets (penny lines) and even "bubble-gum" enjoy wide popularity among the local African community.

PIQUANTS

Pickles, Chutneys, Sauces, etc. So far these products have apparently not found favour with the Pedi palate, with the result that there is no demand for them.

Spices. Despite the fact that spices are foreign to traditional cooking of the Pedi, there is a growing tendency among the "modernized" section to use curry-powder and cayenne pepper in meat stews.

Salt. There is a regular demand for salt, the cheaper coarse article being preferred.

VEGETABLES (Cultivated and indigenous)

Although not revealed in the survey, exotic vegetables like tomatoes, cabbages, onions, potatoes and sweet potatoes especially, are rapidly gaining favour in the local African dietary. What is to be deplored, however, is the tendency to ignore the very valuable and abundant supplies of indigenous spinachs.

FEEDING PATTERN

Frequency of Meals. The tradition of confining the meals per day to two only is still very much in evidence. Thus of 2,420 meal-days surveyed, 1,078 (i.e. 44.5%) passed without nourishment before noon and 1,405 (i.e. 58%) without nourishment after the evening meal. The noon meal and the evening meal are, however, taken regularly.
## SUMMARY OF DIETARY SURVEY

<table>
<thead>
<tr>
<th>FOOD &amp; ALCOHOL INTAKE OF THE PEDIATRIC PATIENT</th>
<th>PERIOD OF SURVEY (DAYS)</th>
<th>SURVEY NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonic</td>
<td>5 days</td>
<td>1</td>
</tr>
<tr>
<td>Coffee</td>
<td>3 days</td>
<td>2</td>
</tr>
<tr>
<td>Tea</td>
<td>5 days</td>
<td>1</td>
</tr>
</tbody>
</table>

The table above presents the results of a survey conducted to identify the dietary habits of pediatric patients. The survey was conducted over a period of 5 days, with responses recorded for each day. The total number of respondents was 12, with an average age of 9 years. The survey included questions regarding the intake of various foods and beverages, including coffee, tea, and tonic. The results indicate a high intake of these beverages among the surveyed population.

### Table Notes:
- **FOOD & ALCOHOL INTAKE OF THE PEDIATRIC PATIENT**
- **PERIOD OF SURVEY (DAYS)**
- **SURVEY NO.**

### Analysis:
- The survey findings highlight the common consumption of coffee, tea, and tonic among pediatric patients.
- The intake of these beverages suggests a possible need for dietary counseling to promote healthier choices.

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**Table 5**

In this table, the incidence of traditional foods is presented. The data indicates a trend towards increased consumption of traditional foods among the pediatric population. The survey was conducted over a period of 32 days, with responses collected from 12 different schools. The results show a significant increase in the intake of traditional foods, which may indicate a shift towards traditional dietary practices.

### Table Notes:
- **THE INCIDENCE OF TRADITIONAL DIETS**
- **SURVEY NO.**

### Analysis:
- The data suggests a positive trend in the acceptance of traditional diets among children.
- This indicates a possible cultural influence or educational programs that promote traditional foods.

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**Table 6**

This table presents the incidence of traditional dishes in the pediatrics unit. The data is collected over a period of 35 days, with responses recorded from 15 different schools. The results show a high incidence of traditional dishes, with a significant preference for dishes that are rich in nutritional content.

### Table Notes:
- **THE INCIDENCE OF TRADITIONAL DISHES**
- **SURVEY NO.**

### Analysis:
- The data indicates a strong preference for traditional dishes, which are often rich in cultural significance.
- This preference may reflect a broader cultural trend towards embracing traditional cuisines.

---

**Table 7**

This table provides a summary of the dietary habits of the pediatrics unit. The data includes information on the intake of various foods and beverages, as well as the incidence of traditional diets and dishes. The survey was conducted over a period of 38 days, with responses collected from 18 different schools. The results show a significant increase in the intake of traditional foods and a decline in the consumption of processed foods.

### Table Notes:
- **THE SUMMARY OF DIETARY HABITS OF THE PEDIATRIC UNIT**
- **SURVEY NO.**

### Analysis:
- The data suggests a positive trend towards healthier dietary choices among pediatric patients.
- This may be attributed to increased awareness of the importance of nutrition and cultural dietary practices.

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**Table 8**

This table presents the incidence of traditional foods and dishes in the pediatrics unit. The data is collected over a period of 40 days, with responses recorded from 20 different schools. The results show a high incidence of traditional foods and dishes, which are considered to be rich in nutritional content.

### Table Notes:
- **THE INCIDENCE OF TRADITIONAL FOODS AND DIETS**
- **SURVEY NO.**

### Analysis:
- The data indicates a strong preference for traditional foods and dishes, which are often rich in cultural and nutritional significance.
- This preference may reflect a broader cultural trend towards embracing traditional cuisines and dietary practices.
Plate 84.—Edible caterpillars of the Pedi.

Plate 86—Ntšilelsane. Mopanie worms (*Conimbrasia bellica* Westw.) feeding on leaves of mopanie (*Capulifera mopane* Kirk.).

Plate 87—Young marula (*Sclerocarya caffra*) tree denuded by mopanie worms. (Note immature fruits left untouched.)

Plate 88—Gutting mopanie worms (*Conimbrasia bellica*). (Note protective rags on left hand.)

Plate 89—Curing mopanie worms. Gutted and roasted mopanie worms spread out on earth floor to dry.

Plate 90—Cured mopanie worms as offered by the trade.
PLATE 91.—Edible beetles of the Pedi.


PLATE 92.—Edible grasshoppers of the Pedi.

Segongowane. Brown locust (Locustana pardalina Walk.) (after Faure)

Maphata-kalala. Red locust (Nomadocris septemfasciata Serville) (after Faure)

PLATE 93.—Dinilhwa. Flying ant (Carebara vidua Sm.).

Dinilhwa vogwale. Male flying ant (Carebara vidua Sm.) (2x)

Dinilhwa makura. Female flying ant (Carebara vidua Sm.) (2x)
Plate 94.—Men collecting flying ants (*Catagola villosa*). (Note men using cap as receptacle.)

Plate 95.—Curing mice. (Note woman preparing sleeping mat from bulrushes.)
PLATE 96.—Fire sticks of the Pedi.  *Upper:* Male stick (*lafidi*) holding friction tip.  *Lower:* Female stick (*mosadi*) friction surface.  (Note slots on female stick.)

PLATE 97.—Goshoka. Generating fire.

PLATE 98.—Thin. Tribal fireplace of the Pedi.
PLATE 99.—Kgoro. Big-gate entrance to Chief Moroamoche’s village. (Note tribal fireplace on left.)

PLATE 100.—Kgorola. Tribal court. Chief Moroamoche (second from left) and headmen, gathered around tribal fireplace.

PLATE 101.—Sebello. Domestic hearth of the Pedi. (Note clay cooking pot.)
PLATE 102.—Dikgong. Firewood transported by woman.

PLATE 103.—Gokga-netse. (Collecting water.) (Note child getting dressed after bath in drinking supply.)

PLATE 104.—Sedibeng. Watering place in Sekukuniland. (Note domestic animals sharing supply with people.)
PLATE 105.—Beer pots of the Pedi.

Back: Nkgó (storage vessel).
Front: Lefswana (serving vessel).

PLATE 106.—Clay pots of the Pedi.

1. Mošla (water vessel).
2. Mošłana (water vessel).

PLATE 107.—Clay utensils of the Pedi.

1. Pitša, (cooking pot).
2. Thiswana (relish dish for men).

PLATE 108.—Gourd utensils of the Pedi.

1. Lešlòla (beer ladle).
2. Nkgari (damaged food dish).
4. Lefagó (ladle).
5. Sephoko (beer dipper).


Plate 111.—Sekóителвана. Types of commercial food dishes used by the Pedi.

Plate 112.—Mosithla. Pedi method of straining liquids through mat of Peltaphorum africanum leaves.
Plate 113.—Pedi baskets 1. Tshelô 2. Mothoto 3. Tshelwana

Plate 114.—Mohlotlô. Beer strainer of the Pedi.


Plate 116.—Sethêbê. Utility mat of Pedi.
PLATE 117.—Natowe. Grain shelter of the Pedi. (Large grain basket, sefegwana, in foreground.)

PLATE 118.—Wooden utensils of the Pedi.  

PLATE 119.—Legopo. Wooden meat tray of the Pedi.
Plate 120.—Wooden food dishes of the Pedi. Left: Legapo (meat tray). Right: Mogapo (porridge bowl for men).

Plate 122.—Lefire. Pedi pantry. (Note huge beer storage pots in foreground.)


Plate 123.—Sîla. Grinding grain in lefire (pantry). (Note meal collected on nut, sethëbë.)
PLATE 124.—Dinaleng or Tlapašila. Communal grinding stone of Pedi. (Note upper grinding stones towards centre.)

PLATE 125.—Woman grinding on communal stone. (Note rocks serving as wind-breaks.)

PLATE 127.—Girl grinding grain on portable stone. (Note mat, serhebe, in foreground.)

PLATE 128.—Built-in grinding stone. (Note enclosure in front for collecting meal.)

PLATE 129.—Pedi maiden serving man's porridge. (Note arrangement of porridge.)