Comment	Collection Site	Source	Species	Isolate	Acession/Name	Read type	Description	Sequencing metho	Assembley via	Annotation via	Assembly Length	GC%	AT%
Concatenated	Mexico	Local	M.incognita	BZU6306	N/A	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	19231	16.52	83.48
Not included	Mexico	Local	M.incognita	BZU6306	ERX10638972 to ERX10638980	Long read	Mitogenome	Oxford Nanopore	Aladin	GeSeq	17041	16.8	83.2
	Mexico	Local	M.incognita	MV	N/A	Short read	Raw sequence	Novaseq	Novoplasty	GeSeq	17851	16.63	83.37
	Russia	Local Local	M.incognita M.incognita	KA	N/A N/A	Short read Short read	Raw sequence Raw sequence	Novaseq Novaseq	Novoplasty Novoplasty	GeSeq GeSeq	17756 17573	16.59 16.71	83.41 83.29
Commented	Russia California	NCBI	M.incognita	W1	SRR4242460	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	15974	16.41	83.59
Concatenated	California	NCBI	M.incognita	W1	SRR4242461	Short read	Raw sequence	HiSeq	Novoplasty				
Concatenated	California	NCBI	M.incognita	VW6	SRR4242463	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	18955	16.09	83.91
	California California	NCBI NCBI	M.incognita M.incognita	VW6 HarC	SRR4242464 SRR4242465	Short read Short read	Raw sequence Raw sequence	HiSeq HiSeq	Novoplasty Novoplasty	GeSeq	16775	16.57	83.43
Concatenated	California	NCBI	M.incognita	HarC	SRR4242466	Short read	Raw sequence	HiSeq	Novoplasty				
	Libya	NCBI	M.incognita	A14	SRR4242456	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16719	16.57	83.43
	North Carolina Ivory coast	NCBI NCBI	M.incognita M.incognita	557R L9	SRR4242467 SRR4242469	Short read Short read	Raw sequence Raw sequence	HiSeq	Novoplasty Novoplasty	GeSeq GeSeq	17808 17090	16.59 16.49	83.41 83.51
	USA	NCBI	M.incognita	L27	SRR4242470	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16802	16.59	83.41
	French West Indies	NCBI	M.incognita	L19	SRR4242479	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16915	16.62	83.38
	Japan Japan	NCBI NCBI	M.incognita M.incognita	Chb_Ash001 Chb_Tgn001	DRR213642 DRR213643	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	16808 16909	16.59 16.55	83.41 83.45
	Japan	NCBI	M.incognita	Chb_Ycmt001	DRR213644	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16941	16.62	83.38
	Japan	NCBI	M.incognita	Fkok_Hkck001	DRR213645	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17721	16.67	83.33
	Japan	NCBI NCBI	M.incognita M.incognita	Hkd_Mr002 Hkd Mr003	DRR213646 DRR213647	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	17297 16532	16.7 16.51	83.3 83.49
	Japan Japan	NCBI	M.incognita	Ibrk_Tkb002	DRR213648	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16939	16.6	83.4
	Japan	NCBI	M.incognita	Kch_Smnt001	DRR213649	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17461	16.61	83.39
	Japan	NCBI	M.incognita	Kch_Ts001	DRR213650	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16771	16.56	83.44
	Japan Japan	NCBI NCBI	M.incognita M.incognita	Kmmt_Gs001 Kmmt Gs003	DRR213651 DRR213652	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	17036 16432	16.57 16.48	83.43 83.52
	Japan	NCBI	M.incognita	Kmmt_Gs004	DRR213653	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16941	16.46	83.4
	Japan	NCBI	M.incognita	Kmmt_Gs005	DRR213654	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17006	16.64	83.36
	Japan	NCBI NCBI	M.incognita	Kmmt_Gs006	DRR213655 DRR213656	Short read Short read	Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty	GeSeq GeSeq	17143 17106	16.67 16.67	83.33 83.33
	Japan Japan	NCBI	M.incognita M.incognita	Kmmt_Gs008 Kmmt Gs009	DRR213656 DRR213657	Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq	17005	16.65	83.35
	Japan	NCBI	M.incognita	Kmmt_Gs010	DRR213658	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17391	16.59	83.41
	Japan	NCBI	M.incognita	Kmmt_Msk001	DRR213659	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	15994	16.42	83.58
	Japan Japan	NCBI NCBI	M.incognita M.incognita	Kmmt_Msk002 Kmmt_Nshr001	DRR213660 DRR213661	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	17516 16749	16.75 16.45	83.25 83.55
	Japan	NCBI	M.incognita	Kmmt_Ymg001	DRR213662	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17004	16.59	83.41
	Japan	NCBI	M.incognita	Kmmt_Ymg002	DRR213663	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16940	16.62	83.38
	Japan	NCBI	M.incognita	Mie_Ykic001	DRR213664	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17052	16.6	83.4
	Japan Japan	NCBI NCBI	M.incognita M.incognita	Myzk_Hyg001 Myzk_Myknj001	DRR213665 DRR213666	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	17073 17005	16.68 16.65	83.32 83.35
	Japan	NCBI	M.incognita	Myzk_Tn001	DRR213667	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17151	16.64	83.36
	Japan	NCBI NCBI	M.incognita	Oit_Tkd001	DRR213668	Short read Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17859 17043	16.84 16.64	83.16 83.36
	Japan Japan	NCBI	M.incognita M.incognita	Oknw_Isgk001 Oknw Isgk002	DRR213669 DRR213670	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	17043	16.64	83.36
	Japan	NCBI	M.incognita	Oknw_Ogm001	DRR213671	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	15407	16.23	83.77
	Japan	NCBI	M.incognita	Oknw_Ynsr001	DRR213672	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17328	16.73	83.27
	Japan Japan	NCBI NCBI	M.incognita M.incognita	Unkwn_Unkwn001 Ymgt Unkwn001	DRR213673 DRR213674	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	16431 17207	16.48 16.67	83.52 83.33
	Japan	NCBI	M.incognita	Ymgt_Unkwn002	DRR213675	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17375	16.55	83.45
	Japan	NCBI	M.incognita	Hkd_Mr001	DRR213676	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16838	16.57	83.43
	Japan	NCBI	M.incognita	Kmmt_Gs002	DRR213677	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	658	10.57	00.40
	Japan Japan	NCBI NCBI	M.incognita M.incognita	Kmmt_Gs007 Kmmt_Ots001	DRR213678 DRR213679	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	16838 15811	16.57 16.29	83.43 83.71
	Japan	NCBI	M.incognita	Mie_Mtzk001	DRR213680	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16663	16.45	83.55
	Japan	NCBI	M.incognita	Ngt_Kjkw001	DRR213681	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16200	16.45	83.55
	Japan	NCBI NCBI	M.incognita M.incognita	Ibrk_Chks001 Kgsm_Ky001	DRR213682 DRR213683	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSea/NextSea	Novoplasty Novoplasty	GeSeq GeSeq	16750 16971	16.44 16.61	83.56 83.39
	Japan Japan	NCBI	M.incognita	Kgsm_Ngsm001	DRR213684	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16940	16.64	83.36
	Japan	NCBI	M.incognita	Kgsm_Nktn001	DRR213685	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	907		
	Japan	NCBI	M.incognita	Kmmt_Shr001	DRR213686	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16600	16.53	83.47
	Japan Japan	NCBI NCBI	M.incognita M.incognita	Ngsk_Ssb001 Shzok_Shmz001	DRR213687 DRR213688	Short read Short read	Raw sequence Raw sequence	HiSeq/NextSeq HiSeq/NextSeq	Novoplasty Novoplasty	GeSeq GeSeq	17043 15618	16.64 16.37	83.36 83.63
	Japan	NCBI	M.incognita		DRR213690	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16430	16.48	83.52
Concatenated	Brazil	Local	M.incognita	R1-2_S1	SRR7504310	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	20644	16.3	83.7
	Brazil Brazil	Local Local	M.incognita M.incognita	R1-2_S1 R1-3_S2	SRR7504311 SRR7504312	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	20704	16.33	83.67
Concatenated	Brazil	Local	M.incognita	R1-3_S2	SRR7504312 SRR7504313	Short read	naw sequelice	Hevroed	reovopiasty	Ововч	20704	10.00	03.01
Concatenated	Brazil	Local	M.incognita	R1-6_S3	SRR7504314	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	16822	16.49	83.51
	Brazil	Local Local	M.incognita	R1-6_S3	SRR7504315 SRR7504316	Short read	Paw seguence	NextSeq	Novoplacty	GeSeq	17160	16.55	83.45
Concatenated	Brazil Brazil	Local	M.incognita M.incognita	R2-1_S4 R2-1_S4	SRR7504316 SRR7504317	S.IOIL IEAU	Raw sequence	rentody	Novoplasty	Second	100	.0.00	30.70
Concatenated	Brazil	Local	M.incognita	R2-6_S6	SRR7504318	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	18584	16.33	83.67
	Brazil	Local Local	M.incognita	R2-6_S6	SRR7504319 SRR7504320	Short road	Paw cogueros	NovtSog	Novonloct:	CoSon	17233	16.59	83.41
Concatenated	Brazil Brazil	Local	M.incognita M.incognita	R3-1_S7 R3-1_S7	SRR7504320 SRR7504321	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	17233	10.03	00.41
Concatenated	Brazil	Local	M.incognita	R3-2_S8	SRR7504322	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	16146	16.31	83.69
Concatenatea	Brazil	Local	M.incognita	R3-2_S8	SRR7504323	Object on the		N10-	Marian 1 - 1	0.0.	20400	10.07	00.75
Concatenated	Brazil Brazil	Local Local	M.incognita M.incognita	R3-4_S9 R3-4_S9	SRR7504324 SRR7504325	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	20136	16.21	83.79
Concatenated	Brazil	Local	M.incognita	R4-1_S10	SRR7504326	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	17271	16.62	83.38
Concatchated	Brazil	Local	M.incognita	R4-1_S10	SRR7504327	Object on the					10504		00.5
Concatenated	Brazil Brazil	Local Local	M.incognita M.incognita	R4-3_S11 R4-3_S11	SRR7504328 SRR7504329	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	16531	16.5	83.5
Consotonated	Brazil	Local	M.incognita	R4-3_S11	SRR7504329 SRR7504330	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	16062	16.31	83.69
Concatenated	Brazil	Local	M.incognita	R4-4_S12	SRR7504331								
Not included Not included	Wuhan Wuhan	NCBI NCBI	M.incognita M.incognita	Wuhan Wuhan	SRR24770443 SRR17088601	Short read Short read	Raw sequence Raw sequence	Novaseq HiSeq					
	Wuhan	NCBI	M.incognita	Wuhan	SRR17088604	Long read	Raw sequence	PACBIO_SMRT	Aladin	GeSeq	21523	17.29	82.71
RefSeq	Mexico	NCBI Local	M.incognita M.unknown	NCMI4 R2-3_S5	NC024097 N/A	Short read	Mitogenome Raw sequence	NextSeq	Primer walking Novoplasty	Pre_annotated	17662 16304	16.35	83.65
used to polish		NCBI	M.arenaria	sample_BZU_6304	ERR11210404	Short read	Raw sequence	HiSeq	,				
Polished	<u></u>	Local	M.arenaria	BZU6304	ERX10638991 to ERX10638997	Long read	Mitogenome	Oxford Nanopore	Aladin	GeSeq	18834	16.78	83.22
4n_used to polish	Shenyang	NCBI NCBI	M.arenaria M.paraarenaria	Shenyang	SRR17088602 SRR17088610	Short read Short read	Raw sequence	Novaseg	Novoplasty				
				Shiping			Raw sequence	Novaseq	Aladin	GeSeq	19467	16.75	83.25
	Shiping Shenyang	NCBI	M.arenaria	Shenyang	SRR17088605	Long read	Raw sequence	PACBIO_SMRT					
3n_used to polish	Shiping		M.arenaria M.paraarenaria	Shenyang Shiping HarA	SRR17088608	Long read Long read Short read	Raw sequence	PACBIO_SMRT	Aladin	GeSeq	20320	17.16 16.51	82.84 83.49
	Shiping Shenyang Shiping California California	NCBI NCBI NCBI NCBI	M.arenaria M.paraarenaria M.arenaria M.arenaria	Shiping HarA HarA	SRR17088608 SRR4242457 SRR4242476	Long read Short read Short read	Raw sequence Raw sequence Raw sequence	PACBIO_SMRT HiSeq HiSeq	Aladin Novoplasty Novoplasty	GeSeq GeSeq GeSeq	20320 16728	17.16 16.51	83.49
3n_used to polish	Shiping Shenyang Shiping California	NCBI NCBI NCBI	M.arenaria M.paraarenaria M.arenaria	Shiping HarA	SRR17088608 SRR4242457	Long read Short read	Raw sequence Raw sequence	PACBIO_SMRT HiSeq	Aladin Novoplasty	GeSeq GeSeq	20320	17.16	

used to polish		Local	M.javanica	BZU6303	ERR11210402	Short read	Raw sequence	HiSeq					
Polished		Local	M.javanica	BZU6303	ERX10638983 to ERX10638988	Long read	Mitogenome	Oxford Nanopore	Aladin	GeSeq	21449	16.59	83.41
Concatenated	California	NCBI	M.javanica	VW4	SRR4242459	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17663	16.54	83.46
	California	NCBI	M.javanica	VW4	SRR4242458	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq			
	California	NCBI	M.javanica	VW5	SRR4242462	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17450	16.63	83.37
	Morocco	NCBI	M.javanica	L57	SRR4242482	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16250	16.42	83.58
	Thailand	NCBI	M.javanica	LD15	SRR4242478	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16349	16.3	83.7
	Burkina Faso	NCBI	M.javanica	LD17	SRR4242471	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16148	16.41	83.59
sed to polish	Longyan	NCBI	M.javanica	Longyan	SRR17088603	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	22028		
olished	Longyan	NCBI	M.javanica	Longyan	SRR17088606	Long read	Raw sequence	PACBIO_SMRT	Aladin	GeSeq	21335	17.05	82.95
RefSeq		NCBI	M.iavanica		NC026556				Primer walking	Pre annotated	18.291		
	USA: Florida	NCBI	M.floridensis	Isolate 5	ERR104974	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16684	16.49	83.51
· annotanatad	USA:Florida	NCBI	M.floridensis	SJF1	SRR4242475	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16191	16.3	83.64
Concatenated	USA:Florida	NCBI	M.floridensis	SJF1	SRR4242474	Short read	Raw sequence	HiSeq	Novoplasty				
Concatenated		NCBI	M.enterolobii	L30	SRR4242473	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	22017	16.92	83.08
	Burkina Faso	NCBI	M.enterolobii	L30	SRR4242472	Short read	Raw sequence	HiSeq	Novoplasty	1			
	Puerto Rico	Local	M.enterolobii	E1834	N/A	Long read	Mitogenome	HiFi	Aladin	GeSeq	19193	17.18	82.82
	Senegal	Local	M.enterolobii	10108	N/A	Long read	Mitogenome	HiFi	Aladin	GeSeq	19029	16.84	83.16
	Togo	Local	M.enterolobii	c6703	N/A	Long read	Mitogenome	HiFi	Aladin	GeSeq	18316	16.82	83.18
	China	Local	M.enterolobii	e1470	N/A	Long read	Mitogenome	HiFi	Aladin	GeSeq	17980	16.85	83.15
	Singapore	Local	M.enterolobii	e8336	N/A	Long read	Mitogenome	HiFi	Aladin	GeSea	18727	16.87	83.13
	Florida	Local	M.enterolobii	n01	N/A	Long read	Mitogenome	HiFi	Aladin	GeSeq	18663	16.79	83.21
	USA	Local	M.enterolobii	n02	N/A	Long read	Mitogenome	HiFi	Aladin	GeSeq	19067	16.88	83.12
RefSeq		NCBI	M.enterolobii		NC026555		Mitogenome		Primer walking	Pre annotated	17053		
		Local	M.hapla	m64069	N/A	Long read	Raw sequence	HiFi	MitoHifi	MitoS2	17558	18.31	81.69
		Local	M.ethiopica	V9	N/A	Short read	Raw sequence	HiSea	Novoplastv	GeSea	17021	16.53	83.47
		Local	M.ethiopica	V14	N/A	Short read	Raw sequence	HiSea	Novoplastv	GeSea	15377	16.59	83.41
	Slovenia	Local	M.luci	V13	ERX3689825 to ERX3689830	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	22003	16.42	83.58
Not included	Slovenia	Local	M.luci	V13	ERX3670349 to ERX3670353	Long read	Mitogenome	PACBIO	Pre_assembled	GeSeq	18064		
		Local	M.luci	V05	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	16645	16.47	83.53
		Local	M.luci	V06	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	15563	16.26	83.74
		Local	M.luci	V11	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	17352	16.59	83.41
		Local	M.luci	V12	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	17147	16.59	83.41
		Local	M.inornata	V07	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	17425	16.56	83.44
Not included	Oregon	Local	M.chitwoodi	Mc1	N/A	Long read	Mitogenome		Aladin	GeSeq	21212	14.67	85.33
		NCBI	M.chitwoodi	Mchitwodii_NCSU_20	ERR1212566	Short read	Raw sequence	MiSeq	Novoplasty	GeSeq	20424	15.21	84.79
RefSeq*	Tulelake	NCBI	M.chitwoodi	CAMC2	NC024096		Mitogenome		Primer walking	Pre_annotated	18,201		
	Costa rica	NCBI	M.exigua	Mex1	MZ359281		Mitogenome		Obittools+velvet	Pre_annotated	20974		
Not included	Brazil	Local	M.oryzae		N/A	Long read	Mitogenome		Aladin		19466	16.7	83.3
RefSeq*		NCBI	M.oryzae	N/A	NC041493		Mitogenome		Obittools+velvet	Pre_annotated	17066		
Polished		Local	M.graminicola		N/A	Long read	Mitogenome		Aladin	GeSeq	19588	16.49	83.51
RefSeq	Hainan	NCBI	M.graminicola		NC056772		Mitogenome		Primer walking	Pre_annotated	19589		
	U.S.A	NCBI	P.vulnus		GQ332425		Mitogenome		Primer walking	Pre annotated	21656		\neg